

USC Lusk

*Casden Real Estate
Economics Forecast*

2023 MULTIFAMILY FORECAST REPORT



**USC LUSK CENTER FOR REAL ESTATE
CASDEN REAL ESTATE ECONOMICS FORECAST
2023 MULTIFAMILY REPORT**

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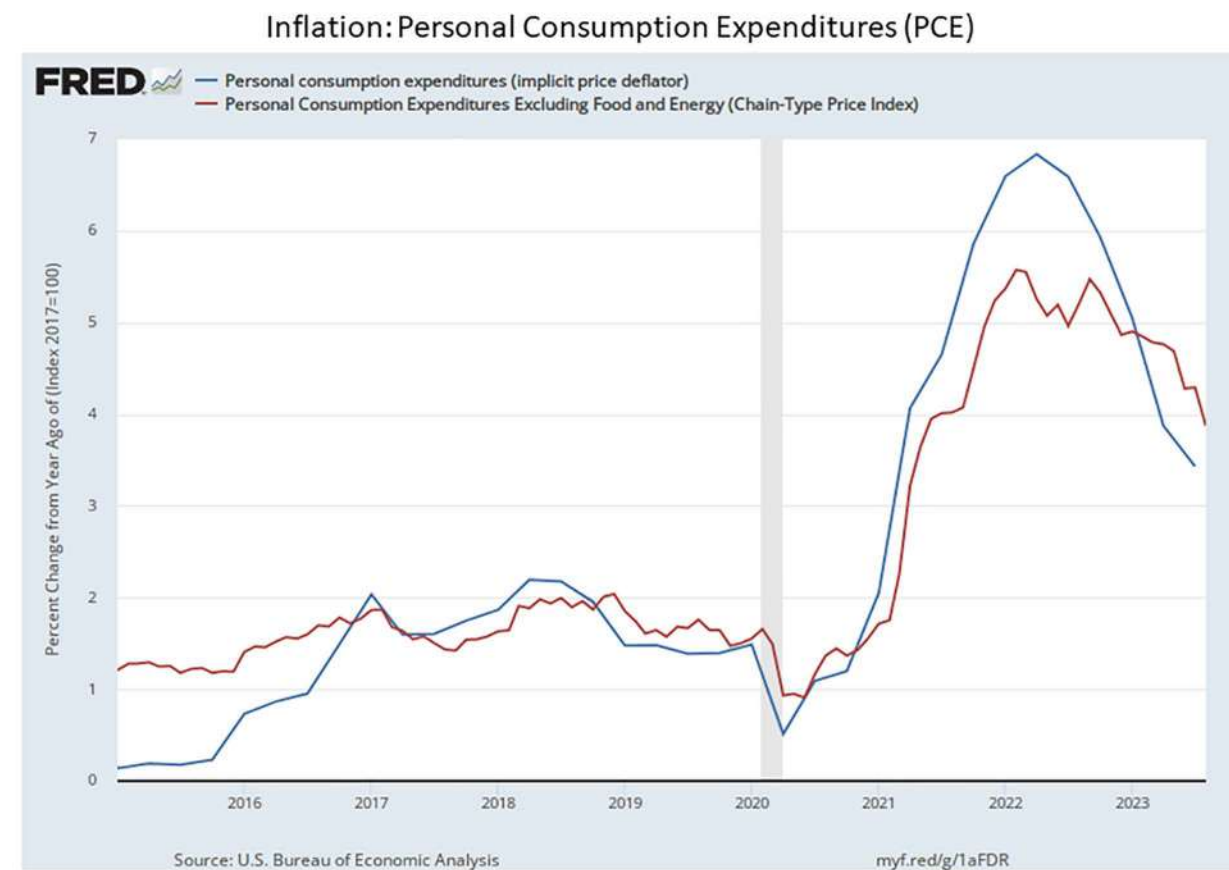
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CASDEN ECONOMIC OUTLOOK

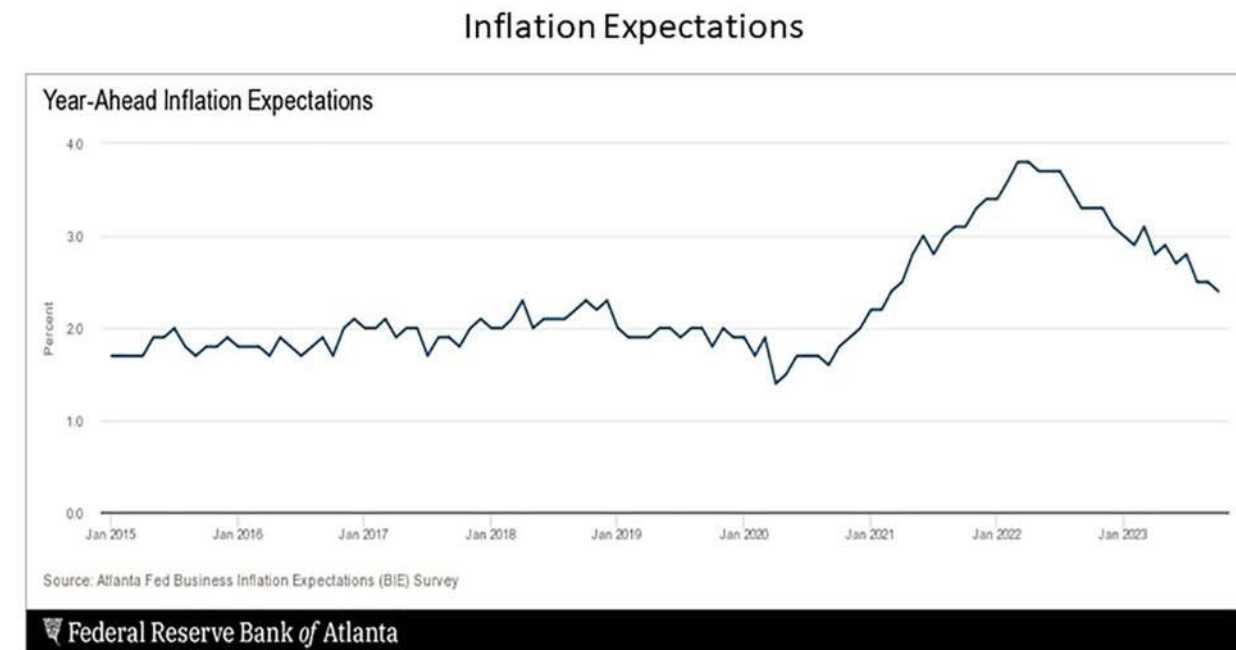
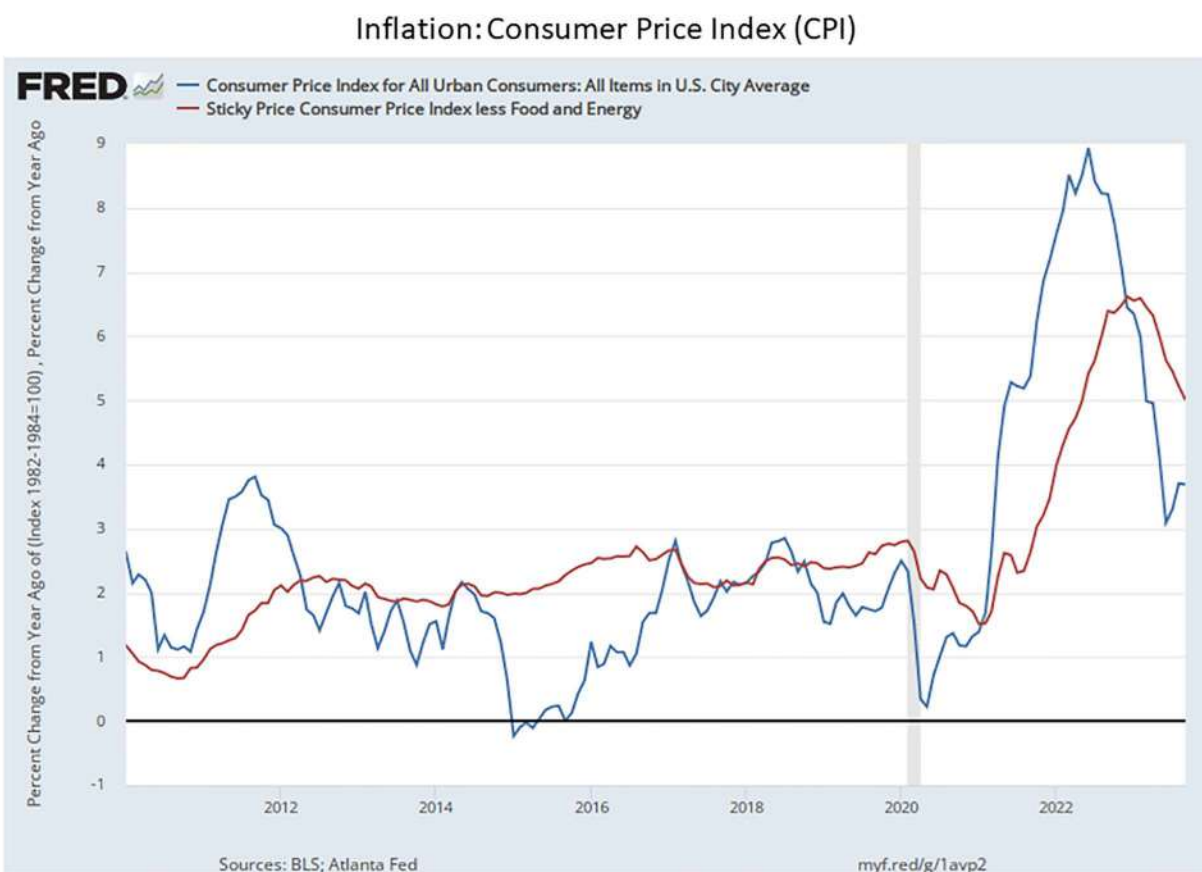
The U.S. economy continues to defy expectations despite interest rates being at their highest in more than twenty years. How the Federal Reserve will approach monetary policy going forward weighs heavily on financial markets and investments, especially commercial real estate development and the refinancing of maturing loans. Commercial real estate is capital intensive, mostly in the form of debt so that property owners can achieve reasonable returns on their investments. The current interest rate environment makes the financing of commercial real estate almost intractable. Will there be any relief soon?

INFLATION

After peaking at 8.9% in June 2022, inflation, as measured by the Consumer Price Index (CPI), has maintained its downward trend from 7.1% twelve months ago to 3.9% at the end of September. The Personal Consumption Expenditure Index (PCE), which is perceived as a better measure of inflation for reflecting changes in consumer behavior, currently stands at 3.4%. “However, the Federal Reserve focuses on the Core CPI, which tracks goods and services included in the CPI whose prices change relatively infrequently. Goods and services that change price less frequently provide a more accurate measure of inflation expectations than prices that change on a more frequent basis.” As the graph shows, the Core CPI significantly lags the full CPI. It currently records an inflation of 5.1% after reaching a peak of 6.7% in December 2022. Its PCE equivalent, the core PCE excluding food and energy, two volatile items, currently estimates inflation at 3.9%.



The Federal Reserve has consistently reiterated that its inflation target remains at 2%. Consequently, it is highly probable that the Federal Reserve will continue to tighten monetary policy if the U.S. economy does not show signs that it is cooling off. The Federal Reserve decided to leave the Federal funds rate unchanged at 5.25% at its November meeting. However, another 25-basis point rate increase remains a possibility by the end of this year or early next year if the downward trend in inflation stalls or the economy continues to outperform expectations. “The emerging consensus is that there may be one last rate increase in this cycle.” Several Federal Reserve Board members have indicated that they would be happy to leave short-term interest rates at current levels until they see strong evidence that inflation has been subdued, which could take time. The survey of businesses published by the Federal Reserve Bank of Atlanta projects inflation to average 2.5% next year.

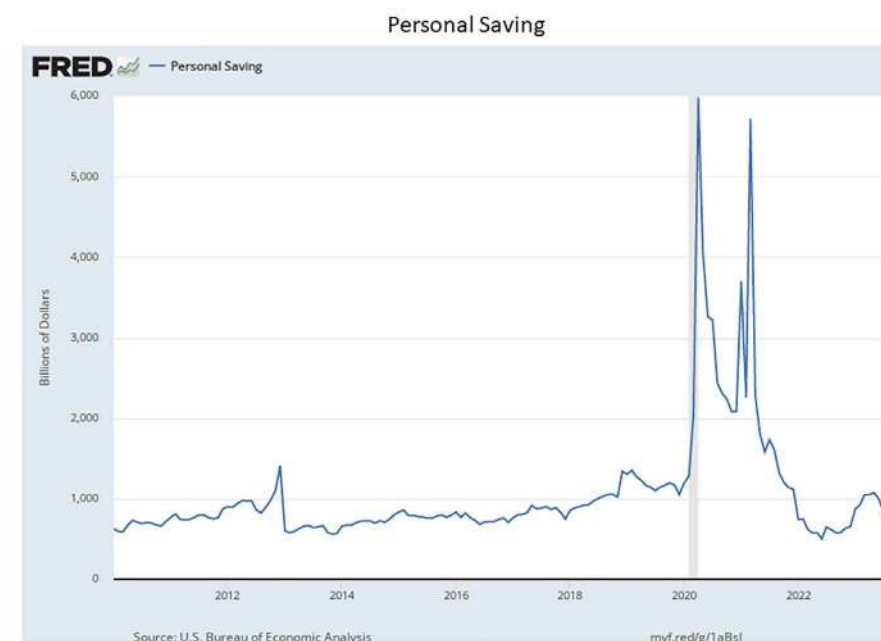
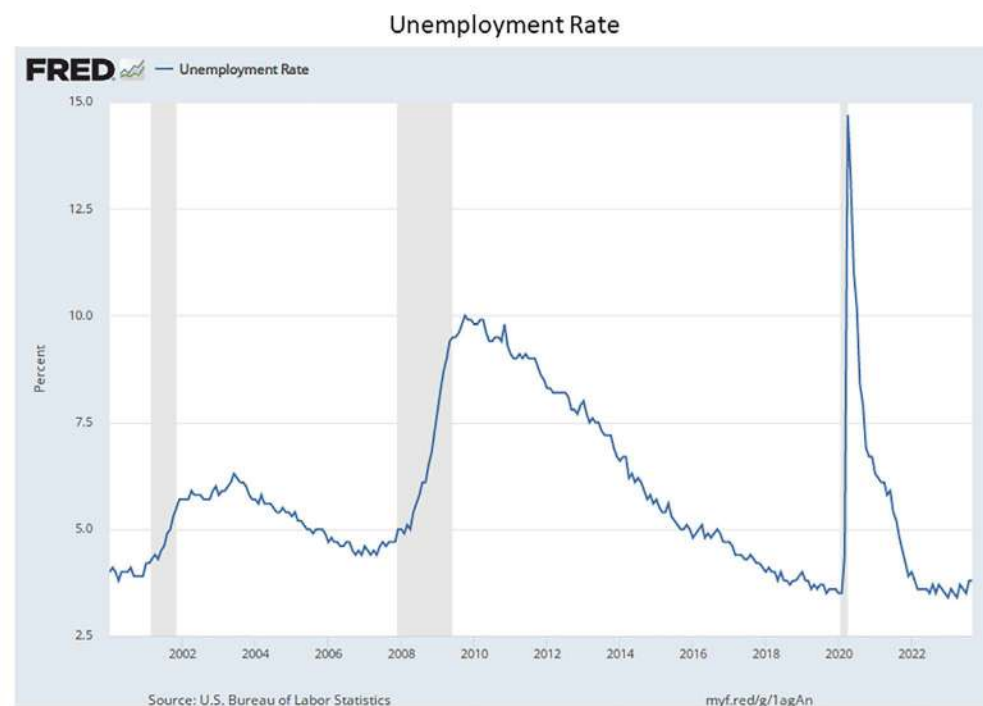
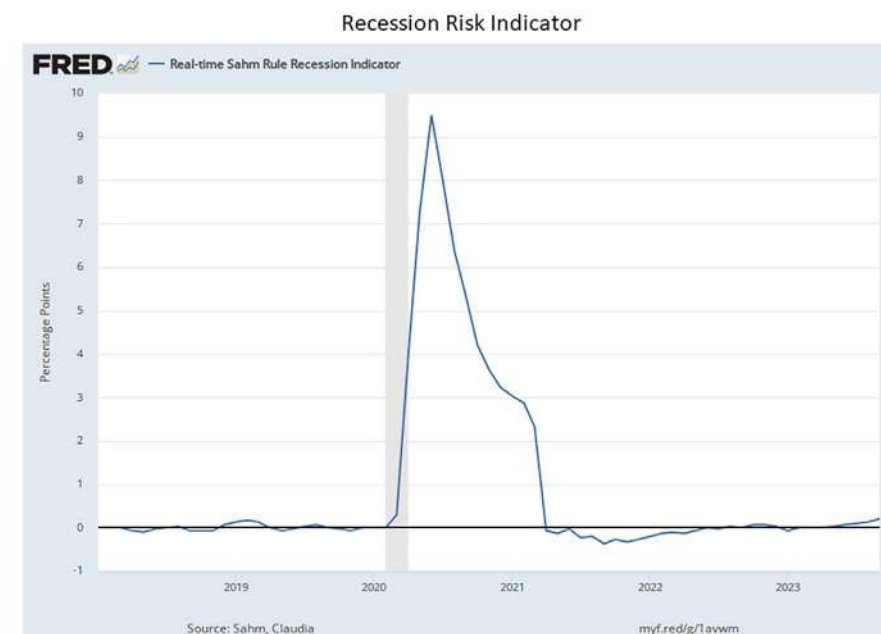


ECONOMIC GROWTH

Despite the Federal Reserve’s continued efforts to slow down the economy and tame inflation, the economy has been quite resilient. Recession worries from high interest rates have all but subsided for now, with the Federal Reserve touted to have magically engineered an implausible soft landing. Wage growth, a key driver of inflation, has slowed down significantly of late despite the economy seemingly firing on all cylinders. The economy unexpectedly expanded at a robust 4.9% annual rate during the third quarter of this year despite higher prices and interest rates. Since the end of the pandemic-induced recession, the unemployment rate has remained at an all-time low. “The Sahm Recession Indicator is tracking the three-month moving average inflation rate significantly below the .5% threshold that would be indicative of a pending recession.” The last recession was much

shorter than previous ones because it was largely due to most economies shutting down to limit the spread of the COVID-19 virus. The resulting supply bottlenecks and expansionary monetary and fiscal policies sent inflation soaring. The resolution of supply problems and the depletion of households’ cash reserves (see the personal saving graph) have surely significantly contributed to the decrease in prices. Even though monetary policy has generally limited reach in dealing with supply-driven inflation, choking demand undoubtedly helps, too.

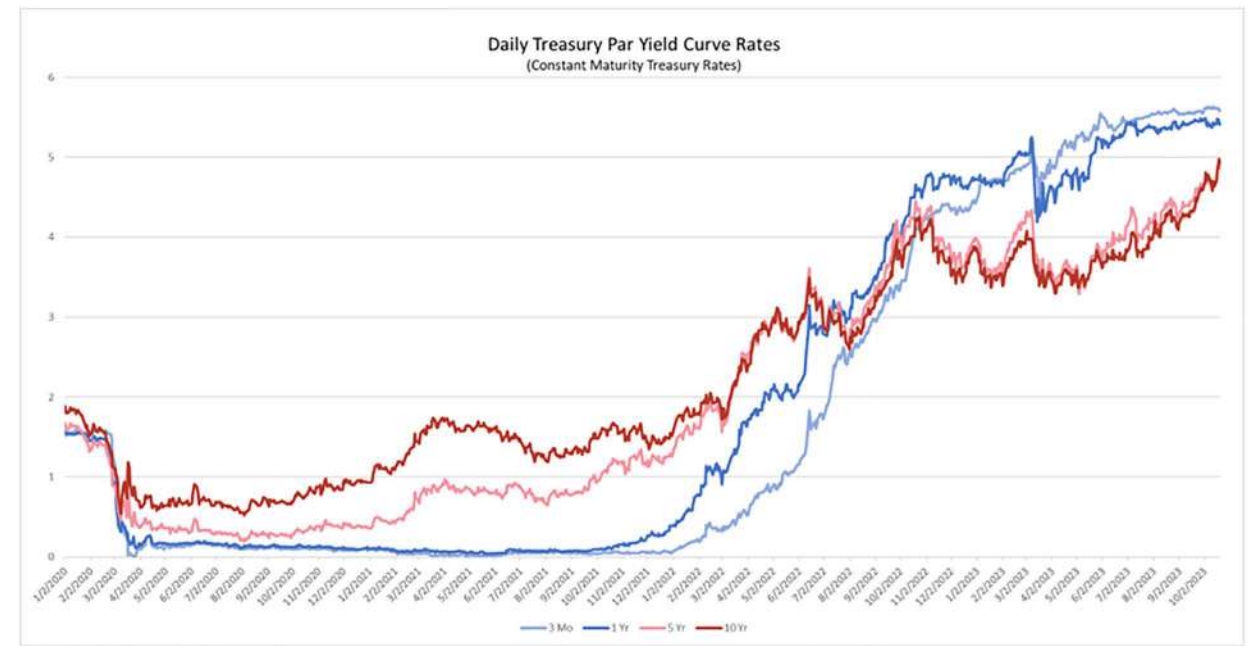
Now, the fundamental question is how much pain should be inflicted on the economy to force inflation down from the current 3.5% to the Federal Reserve’s target of 2%. Continued positive economic news will likely reinforce the reserve bank’s concerns about future inflation and prevent it from lowering interest rates in the near future. So far, higher interest rates have had limited effect on unemployment, the channel through which monetary policy typically works. Maybe, the effect is delayed. Maybe the lower than expected October job numbers indicate that the labor market is finally cooling off. However, the last leg of the journey back to 2% inflation will not be as painless. There is a risk of the economy stumbling into recession if interest rates remain high for too long.



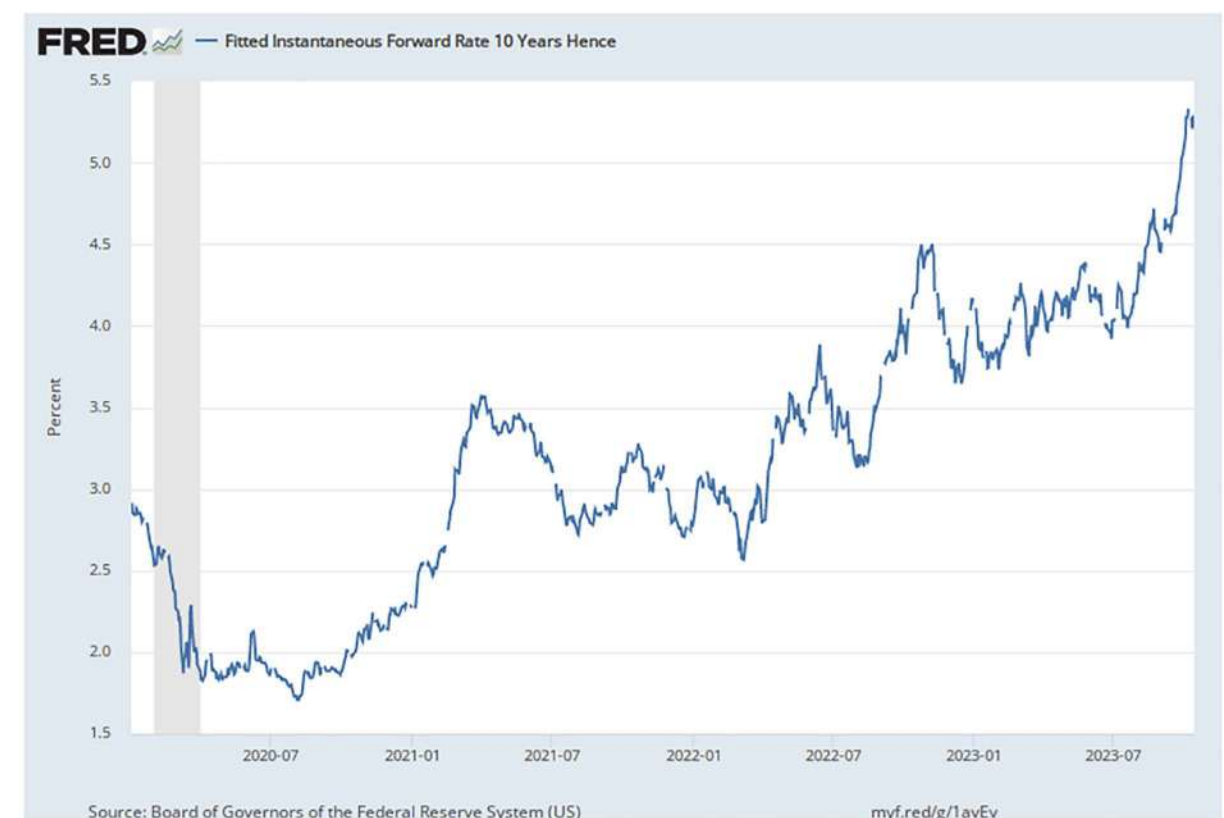
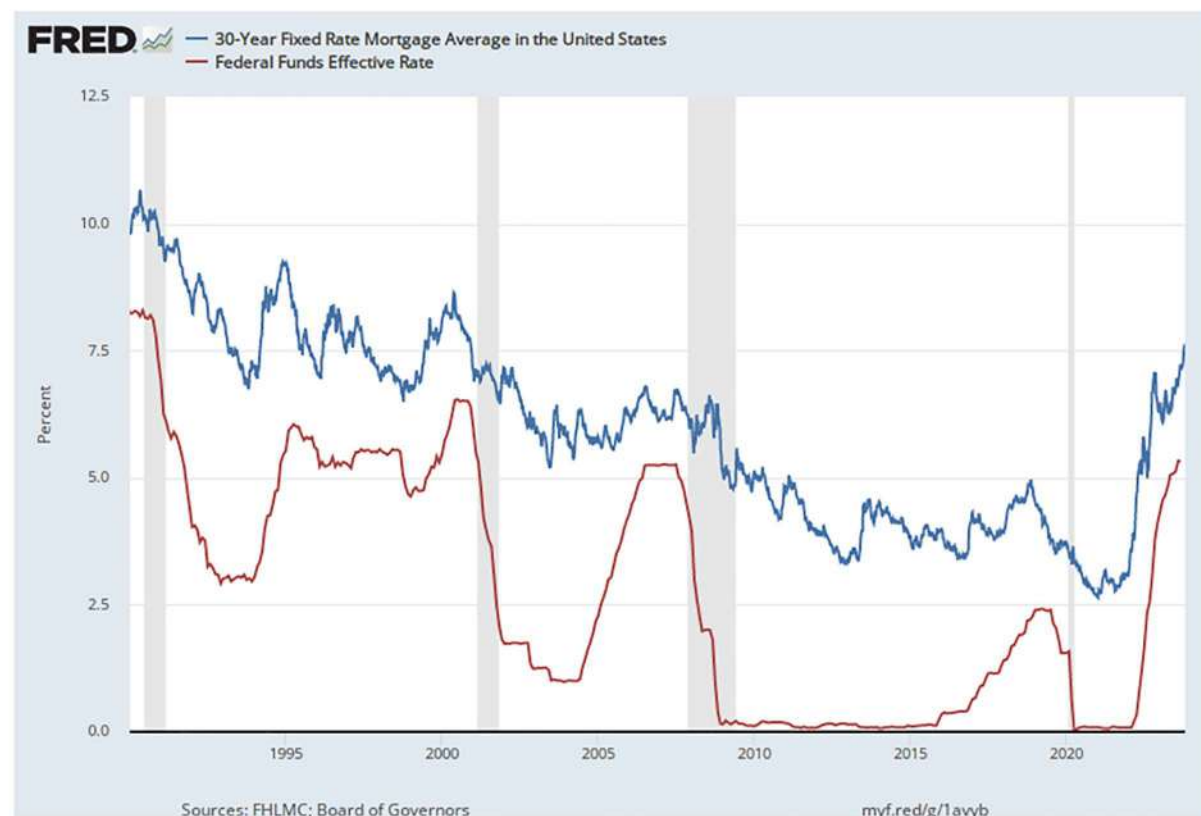
A NEW REALITY OF HIGHER INTEREST RATES

Until the Fed embarked on its recent contractionary monetary policy to fight inflation, long-term interest rates had consistently trended downward for decades. Available data show that the 30-year mortgage rate fell for the first time below 5% after the Global Financial Crisis as the Federal Reserve precipitously cut the federal funds rate to almost zero to combat the deepening recession. The ten years of ultralow interest rates that followed now look like an anomaly from a historical perspective that inflated asset values and created perverse incentives for households and firms. Furthermore, near-zero interest rates severely limit the reach of monetary policy, forcing the Fed to turn to less orthodox monetary tools.

As the Federal Reserve continued raising short-term interest rates and communicated its determination to keep that policy in place until inflation is back under control, long-term interest rates started to rise as well. Interestingly, the term structure of interest rates depicting the relationship between short- and long-term interest rates started to flatten with the interest rate increases before inverting about a year ago as the Federal funds rate crossed 4%, suggesting that investors believed then that the Federal Reserve would soon reverse course. But as the Federal Reserve kept increasing interest rates and indicated that the fight against inflation was not over yet, long-term interest rates started to drift upward again, inflicting more pain to many investors.



No one can predict how long high interest rates will last and it would certainly be unwise to expect any significant relief soon. However, one can safely predict that the low-interest environment of the last decade is unlikely to come back. A 30-year interest rate of 8% may not be sustainable in the long run. But the likelihood of long-term interest rates dropping below 5% any time soon is low. The market expects higher interest rates going forward. After hovering around 4%, the 10-year Treasury forward rate is now approximately 5.5% following the recent spike in longer maturity yields. It is highly unlikely that the Federal Reserve will start loosening monetary policy before mid-2024. But it should be obvious by now that the era of cheap money is firmly behind us. Real estate investors will have to adapt to this new reality going forward.



THE APPROACHING TSUNAMI OF DEBT MATURITIES

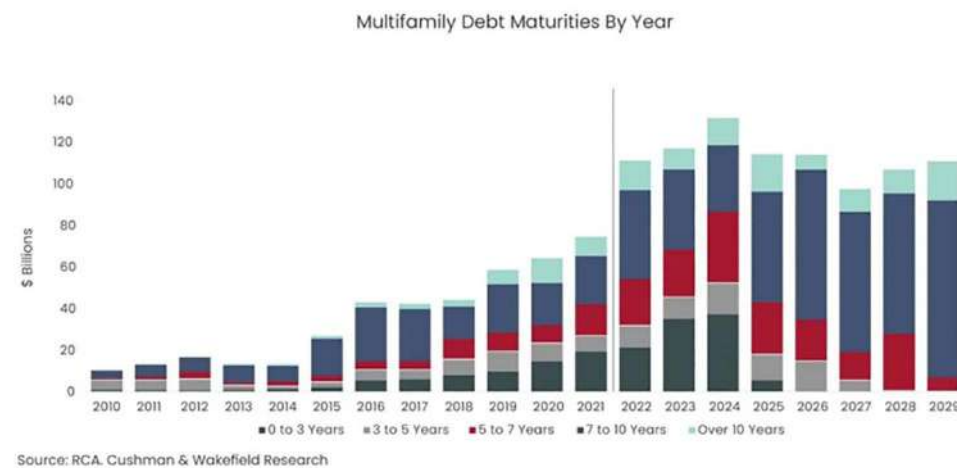
According to the Mortgage Bankers Association (MBA), the amount of commercial real estate debt outstanding at the end of the second quarter of 2023 was \$4.6 trillion. Multifamily mortgages account for 44% of that amount or \$2.03 trillion. Due to high interest rates, commercial mortgage originations are expected to decline by 46% this year from \$816 billion in 2022 to \$442 billion. However, origination volumes are expected to recover next year.

CRE Loans Outstanding as of End 2023Q2

	All Property Types		Multifamily	
	Amount (\$ bil.)	%	Amount (\$ bil.)	%
Mortgage Debt Outstanding	\$4,603.6	100.0%	\$2,027.3	100.0%
By Sector:				
Banks and Thrifts	\$1,758.4	38.2%	\$600.2	29.6%
GSEs	\$970.6	21.1%	\$970.6	47.9%
Life Insurance Cos	\$692.1	15.0%	\$219.0	10.8%
CMBS	\$592.7	12.9%	\$65.3	3.2%
REITs	\$186.0	4.0%	\$6.6	0.3%
States and Local Governments	\$136.2	3.0%	\$114.1	5.6%
Others	\$267.8	5.8%	\$51.5	2.5%

Source: Mortgage Bankers Association

Multifamily Maturities (Graystone)



The MBA estimates that nearly \$2.7 trillion of commercial mortgages, including \$1 trillion of multifamily mortgages, will be due for refinancing by 2027. Based on these estimates, the looming wave of refinancing could easily top \$350 billion annually in total and \$140 billion for multifamily.¹ Cushman & Wakefield estimates that almost every year from 2022 to 2029, more than \$100 billion in multifamily debt will mature, surpassing the all-time high mark of \$75 billion recorded in 2021.

What caused the impending high volumes of commercial mortgage maturities? Over the last decade, many multifamily investors increased borrowing as property values soared or refinanced their loans to take advantage of historically low

¹These figures are derived by spreading maturities over five years and assuming a 30% amortization.

interest rates to boost returns. This additional credit on top of the regular level of borrowing is behind the high volumes of refinancing expected in the next few years. Unfortunately, high interest rates will make refinancing challenging, particularly for properties located in cities that have not experienced significant rent growth over the last decade. The following simple simulation highlights the difficulty some property owners may face to refinance maturing loans.

Let us consider four loans that were originated over the last decade in 2020, 2018, 2016, and 2013. For simplicity, let us also assume that the loans are of similar risk

Refinancing Simulation

Loan Vintage	2020	2018	2016	2013
Term (years)	3	5	7	10
Spread (Bps over 10-year Treasury)	300	300	300	300
10-Year Treasury Rate at origination	0.93	2.69	2.45	3.04
Original Interest Rate	3.93	5.69	5.45	6.04
Current 10-year Treasury	5.00	5.00	5.00	5.00
Refinancing Rate (assuming same spread)	8.00	8.00	8.00	8.00
1. 30-Year Amortization Loans				
Increase in Debt Service	55%	27%	30%	22%
Required Annual Rent Growth	16%	5%	4%	2%
2. Interest-Only Loans				
Increase in Debt Service	104%	41%	47%	32%
Required Annual Rent Growth	27%	7%	6%	3%
Change in RCA CPPI (September 2023)	17%	33%	68%	121%

and were priced at 300 bps over the 10-year Treasury rate and will be refinanced at the same risk spread over the Treasury. Based on these simplifying assumptions, all four loans will be currently priced at 8% since the 10-year Treasury rate is about 5%. The resulting new debt payments will be much larger because the original loans were made when interest rates were much lower – the 10-year Treasury rate dropped from 3% in 2013 to 0.9% in 2020. However, the payment increases will also depend on the loans' amortization speed. If both the old and new loans amortize over 30 years, debt service will go up by 55% for 2020 loans and 22% for loans originated in 2013 because interest rates were higher then. But payment increases will even be larger if the loans are interest only (IO). Assuming that the corresponding IO loans are also granted at the same risk spread, debt payments will now soar to 104% for 2020 loans and 32% for 2013 loans – the new payments will be even higher if the refinancing loans are amortized.

Despite tighter underwriting standards, LTV requirements are unlikely to be binding for most borrowers because property values have appreciated significantly since the loans' origination. Even properties backing 2020 loans have appreciated by 17% on average based on the RCA multifamily property value index. The binding constraint will be DSCR. Unless new DSCR requirements are substantially lower, loans originated within the seven years before the Federal Reserve started tightening the money supply will not be easy to refinance unless borrowers are willing and able to substantially inject additional equity. The problem will be more acute for properties located in low-rent growth markets like Los Angeles. In those markets, even loans going as far back as 2013 could end up in distress.

What steps can owners with pending maturities take? Overleveraged investors must act proactively by reevaluating rent projections and approaching lenders before their loans become due. Fortunately, about 50% of multifamily loans are guaranteed by the GSEs, with banks and thrifts holding 30% of the loans and insurance companies owning an additional 10%. CMBS loans, the most difficult loans to renegotiate, only account for about 3% of outstanding loans, according to the MBA. Consequently, the GSEs will likely take the lead in coming up with a framework for the renegotiation of maturing loans. If renegotiation fails, owners may have to inject more equity to bring loan balances down or face foreclosure.

Multifamily property owners should start setting aside more cash from operations and raising additional cash from investors. This additional cash can be used to pay down maturing loans if needed or take advantage of attractive acquisition opportunities. As a barometer, the CMBS delinquency rate currently stands at 4.4% for all property types, its highest level since December 2021, but only 2.2% for multifamily. Loan defaults and property foreclosures will rise.

Finally, it is possible that the wave of refinancing is just the tip of the iceberg. Underneath may lay outstanding adjustable-rate loans with no proper hedge in place. Even though some borrowers may end up in technical default as high interest rates erode DSCR requirements, the biggest risk is operating cash flows not being sufficient to cover debt payments. Unfortunately, it may be already too late to hedge interest rate risk. Even interest rate caps have become too expensive. These owners too may be wise to stash as much cash as possible.

SURGING OPERATING EXPENSES

Some areas of the country have experienced substantial increases in multifamily property operating expenses in part due to more frequent natural disasters, hurricanes, floods, and wildfires. Using operating data from properties backing CMBS loans, Trepp recently conducted a detailed review of multifamily property operating expenses nationally. The review ranks the 50 largest multifamily markets according to changes in total operating expenses from 2021 to 2022 and also examines changes in property insurance, real estate taxes, and utility expenses over that period.

Overall, Southern California markets are in the middle of the pack. None were among the 15 cities with the largest increase or decrease in operating expense ratio (OER), the ratio of total operating expenses to total revenues, or operating expenses per unit. However, the average change in operating expenses was relatively large. The markets with the largest and lowest change in average operating expense per unit was Providence, RI at +19.8% and Birmingham, AL at +5.8%, respectively. These increases are not small. To put it in context, the average multifamily rent growth was 6.2% in 2022 and 2.1% from January to August 2023, according to Yardi Matrix. We forecast rents to grow in Southern California by 2% to 3.5% annually over the next two years.

Property insurance, a key component of operating expenses that is not under the direct control of property owners, was a major contributor to the increase in

multifamily property operating costs. Trepp finds that property insurance increased on average by approximately 14% in 2022 across the 50 largest multifamily property markets. As expected, the largest increases were in Florida, Texas, and Louisiana given the increased frequency and severity of weather-related disasters in those areas. However, the increase in property insurance premiums is not restricted to southern states. Wildfire disasters have also become more prevalent, causing insurance costs to increase by 21% in Salt Lake City, 16% in Denver, and 17% in Riverside-San Bernardino-Ontario. On average, insurance costs increased faster than other operating expenses in 2022 and this is likely to continue. In addition to experiencing more devastating wildfires, Southern California has also seen more rains and flooding. Furthermore, insurance costs are bound to increase as some insurance companies stop underwriting new policies in California or exit the market. Property owners have limited ability to pass on these costs to tenants.

MIGRATION AND HOUSING SUPPLY

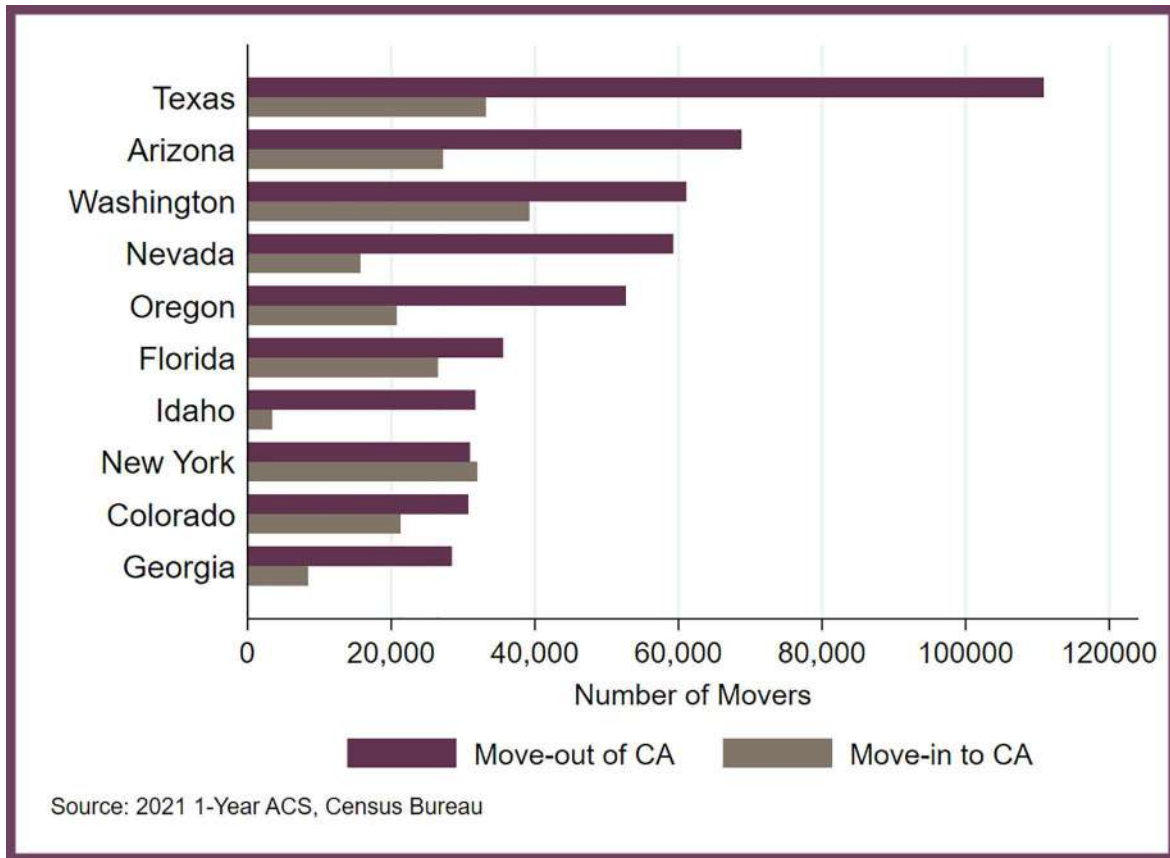
“The populations of cities go up and down as economic opportunities, housing costs, and local amenities change. From April 2020 to July 2022, California lost 510,000 residents, or 1.3% of its population, predominantly to Texas, Nevada, Arizona, Oregon, Idaho, Washington, and Georgia; Los Angeles County has been one of the most affected regions. As the wave of emigration continues, California has found itself in an unenviable position and must extricate itself from this potentially vicious cycle.

People are not leaving California because of better job opportunities in those states. Only 25% of California residents who moved to Texas, the largest destination by far, are in the 18 to 35-year age group. Employment and housing are the driving factors of location decisions. California remains a competitive location for employment. Unfortunately, it is one of the most expensive housing markets in the country. Economic theory suggests that housing, even if adequately supplied, will be more expensive in more productive cities like Los Angeles. However, a chronic deficit in housing supply has exacerbated housing affordability in California and further contributed to people leaving the state.

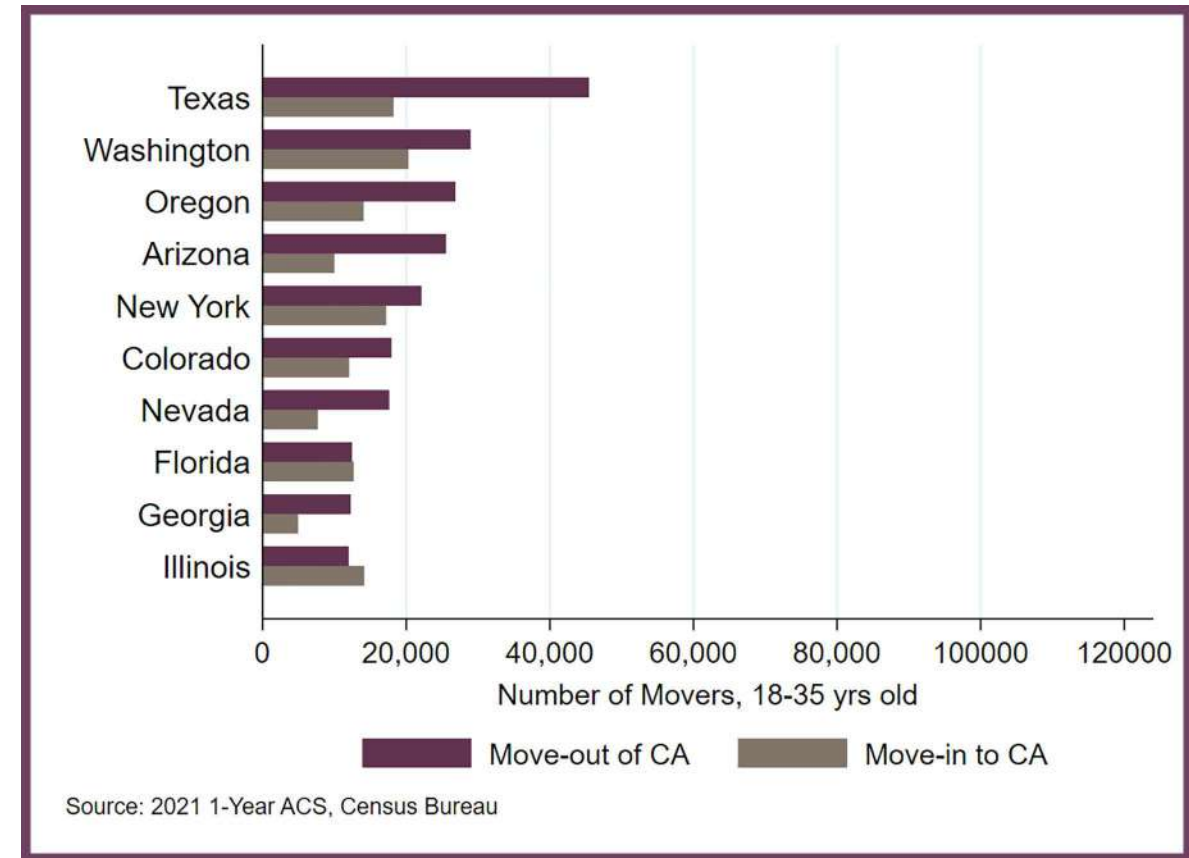
Southern California has consistently built far less housing than Houston and Dallas, especially during the last two decades. The Inland Empire has recently done slightly better than the rest of Southern California but has produced much less housing than in the past. Ventura County has done worse. Los Angeles County has barely increased housing production over the last two decades. Hopefully, the recent increase will continue.

It is somewhat unfair to compare Southern California to Dallas or Houston because these are different markets. However, it remains a puzzle why both Houston and Dallas are producing as much housing per capita as before 2007, whereas Southern California is producing much less than before. Obviously, the only thing that might stand in the way of migration back to California, particularly Southern California, is the very slow pace of housing supply.

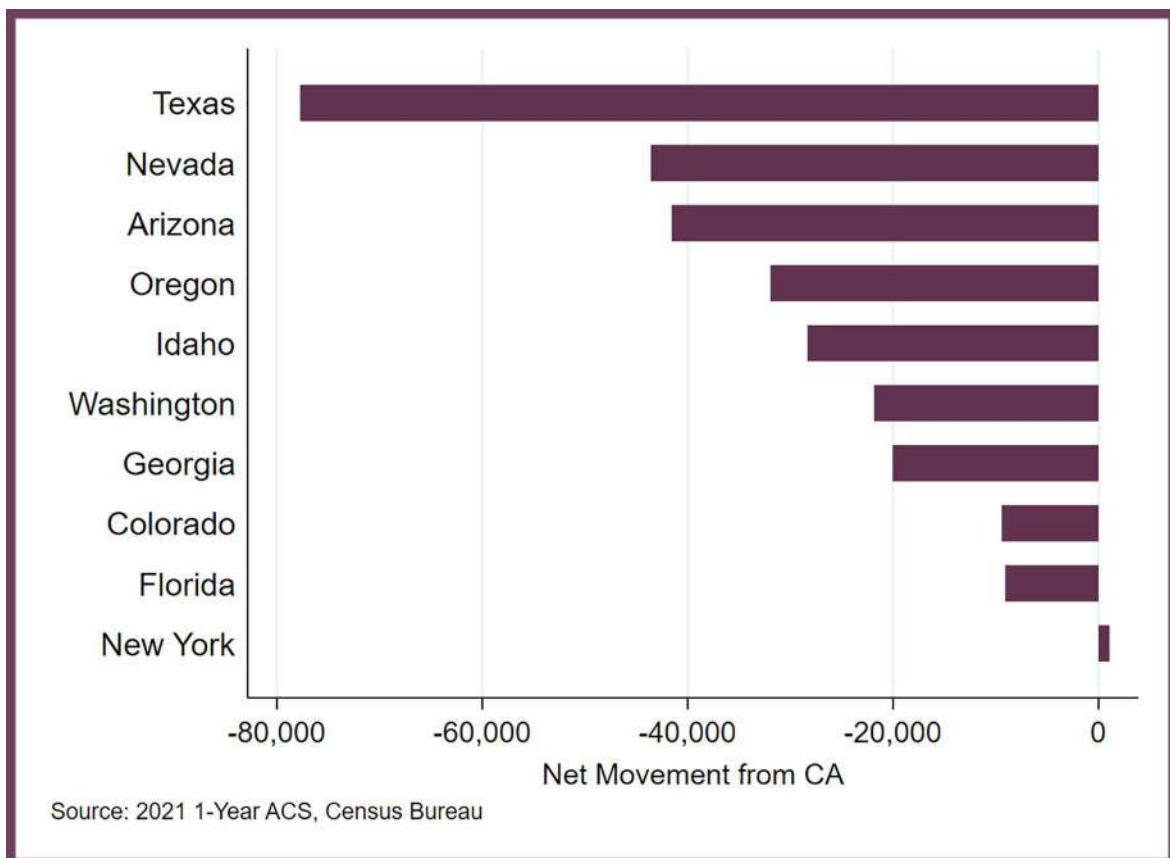
Inter-State Movement from California, 2021



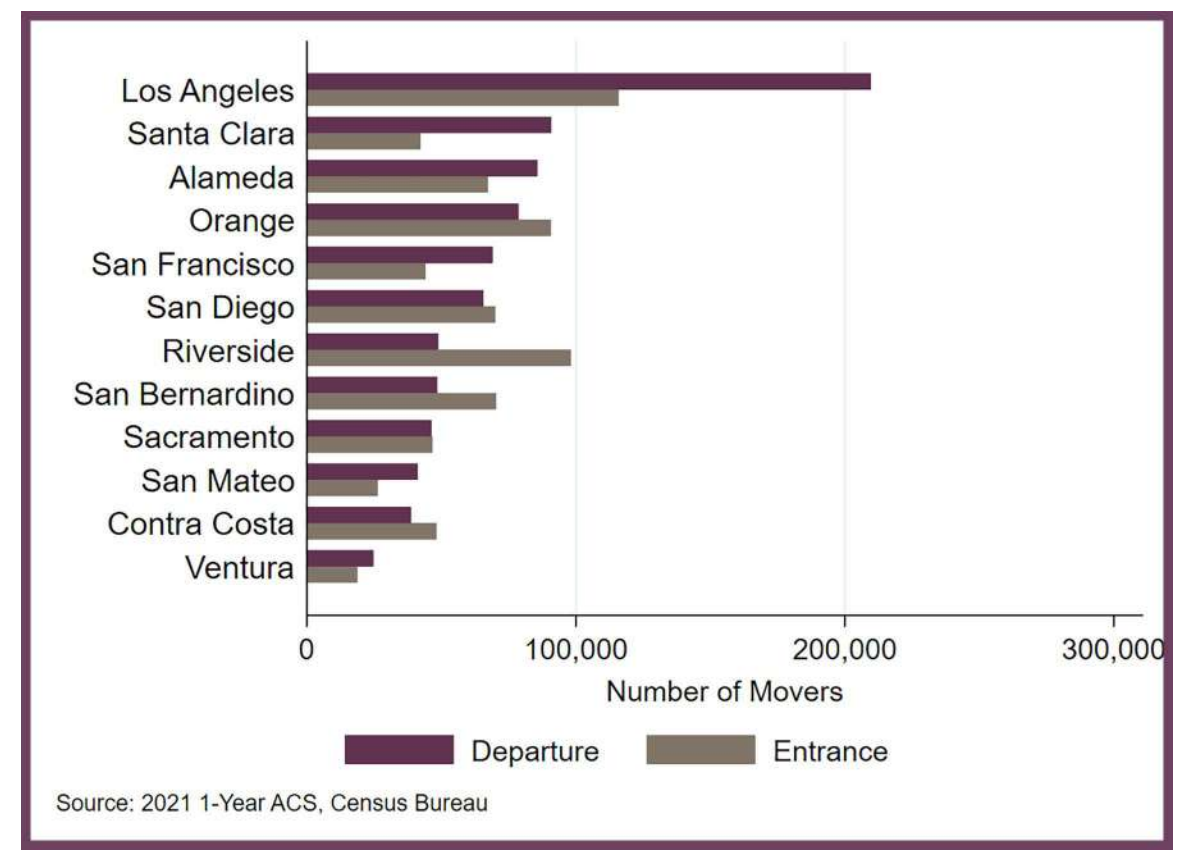
Inter-State Movement of Young Adults from California, 2021



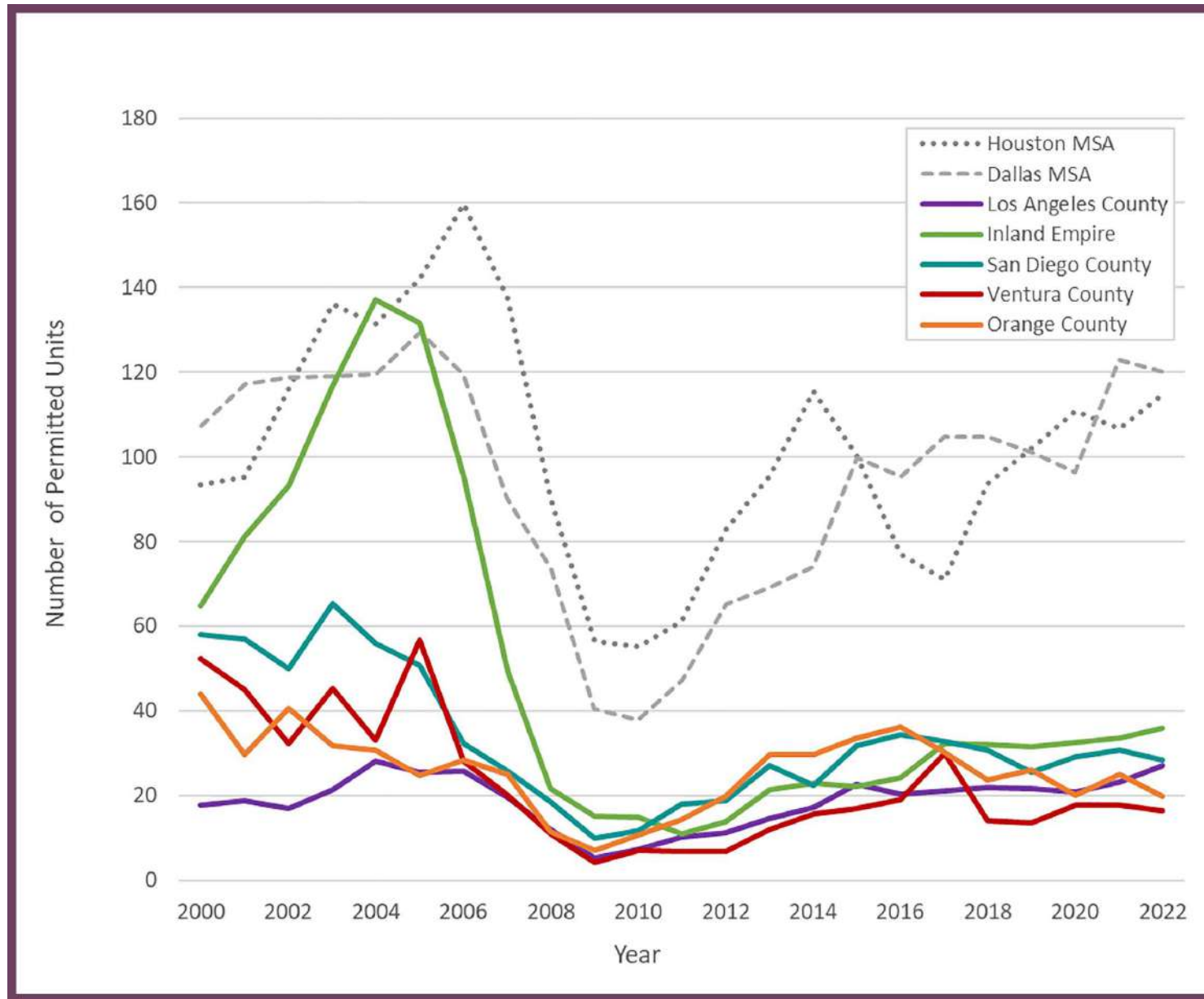
Net Inter-State Movement from California, 2021



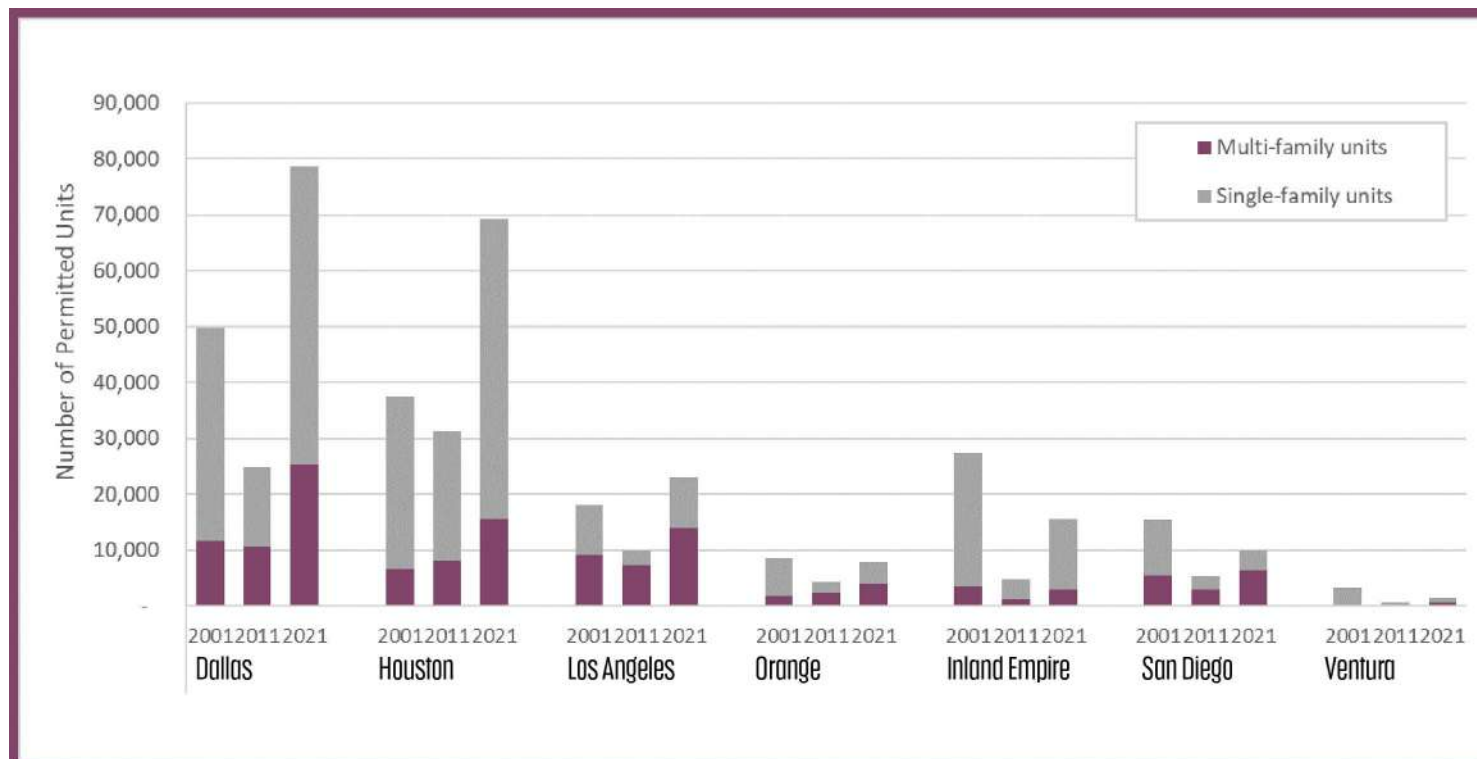
Inter-County Movement from Select CA Counties, 2021



Texas and California: Number of Permitted Units per 10,000 Population



Number of Permitted Units by Building Size



USC CASDEN ECONOMIC FORECAST
2023 MULTIFAMILY FORECAST REPORT

Los Angeles



LOS ANGELES COUNTY

	ALL	RENTERS
RACE		
white only(%)	24.63	19.94
black only(%)	7.36	9.01
asian only(%)	14.66	11.25
hispanic(%)	49.11	55.89
other race(%)	4.24	3.91
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	14.57	16.8
highschool diploma, 18 yrs or more(%)	17.25	18.15
some college education, 18 yrs or more(%)	21.38	20.18
bachelors degree, 18 yrs or more(%)	16.92	15.39
more than bachelors degree, 18 yrs or more(%)	8.84	6.26
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		27.1
renter households living in 2-4 unit housing(%)		13.77
renter households living in 5-9 unit housing(%)		13.32
renter households living in 10-19 unit housing(%)		12.51
renter households living in 20+ unit housing(%)		32.32
renter households living in other types of housing(%)		0.98
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		50.69
renter households living in a structure built between 1970 and 1999(%)		36.6
renter households living in a structure built between 2000 and 2009(%)		6.04
renter households living in a structure built between 2010 and 2019(%)		6.33
renter households living in a structure built in 2020 and 2021(%)		0.35
HOUSEHOLD STATISTICS		
share of renter households(%)	53.49	
share of renter households living in multifamily structure(%)		58.15
share of rent-burdened households(%)		56.25
share of households with children(%)	43.33	38.84
average household size	2.91	2.66
median household income	\$77,245	\$55,616
MIGRATION STATISTICS		
population living in the same house for over a year(%)	89.7	86.71
population who moved within CA last year(%)	7.96	10.24
population who moved from other states to CA last year(%)	0.95	1.29
population who moved from abroad last year(%)	0.43	0.61

Source: 2021 1-Year American Community Survey • *Rent burden is the share of households whose rent payments exceed 30% of income.

Los Angeles County

The rental housing shortage in Los Angeles County remains a chronic problem. Even though the number of delivered units was above average for the last twelve months at approximately 3,000 units per quarter, the county is still not producing enough housing. For the last three years, the county has increased its rental housing stock by about 1% annually.

After a small increase in 2022, the number of housing unit permits issued dropped by 5% to 19,120 during the first three quarters of 2023 as high mortgage rates further depress development activity. Most of this decrease in permitted units was for rental housing with the number of building permits issued for multifamily units dropping by 13% from 12,555 to 10,909. At this pace, even fewer units will be delivered in the future, which would lead to higher rents and further limit access to housing for households at the lower end of the income distribution.

Rents have been flat at \$2,230 so far this year as vacancy remained at 4.8%. As deliveries slow down over the next two years, rent is projected to grow slowly at an annualized rate of about 2% to \$2,306 in 2025Q3, with vacancy slightly decreasing to 4.5% by then. The decreasing rental housing supply in Los Angeles County will create the conditions for vacancy to fall and rent to pick up steam in the future if interest rates remain high.

The City of Los Angeles approved Measure ULA in November 2022, which imposes an additional transfer tax on property transactions of \$5 million or more to fund affordable housing and fight homelessness. The new law became effective on April 1, 2023. This additional transfer tax of 4% for properties valued between \$5 and \$10 million and 5.5% for properties worth more than \$10 million applies to

The decreasing rental housing supply in Los Angeles County will create the conditions for rent to pick up steam in the future if interest rates remain high.

all properties, including commercial real estate transactions. Several academic studies have shown that housing markets price regulation costs and taxes. Unfortunately, the more inelastic demand is, as is the case in Los Angeles, the more the share of the burden borne by renters is. In the long run, this new transfer tax could lead to higher rents and property prices and could even shift development activity away from the City of Los Angeles to nearby cities with no similar tax.

Both emigration from and immigration to Los Angeles County rose in 2021. But despite its strong, well-diversified economy, nice weather, advantageous geographic location, and diverse communities, Los Angeles County continues to lose population. In 2021, approximately 331,000 Los Angeles County residents moved away, while 185,000 people moved to the county, resulting in a net population loss of 146,500 residents. As expected, most of this population loss

Source: USC Casden forecasts based on CoStar data

was to neighboring counties, the Inland Empire (35,400), Orange County (21,600), and Ventura County (4,800) – in contrast, Los Angeles County gained 2,300 residents from San Diego County. Three potential explanations for this wave of local emigration away from Los Angeles County are housing affordability, employment opportunities at those locations, and politics.

Los Angeles County remains a desirable location. But to reverse this outmigration tide, it needs to address its chronic housing affordability crisis.

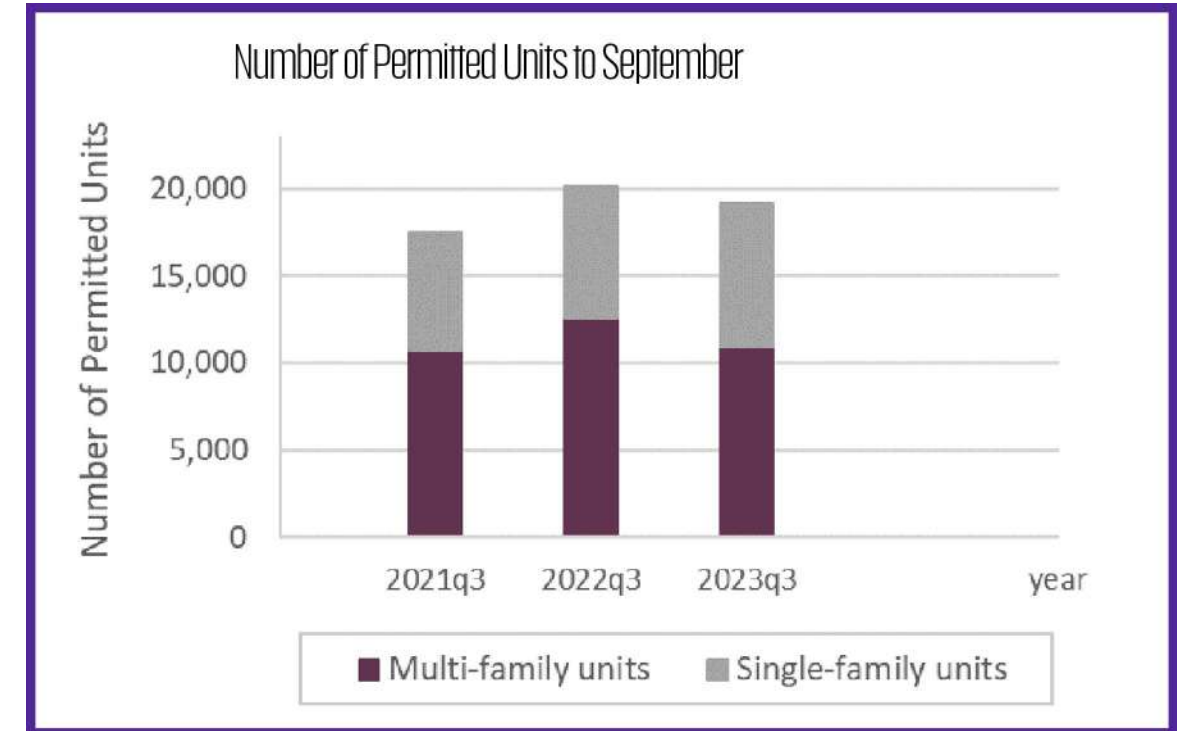
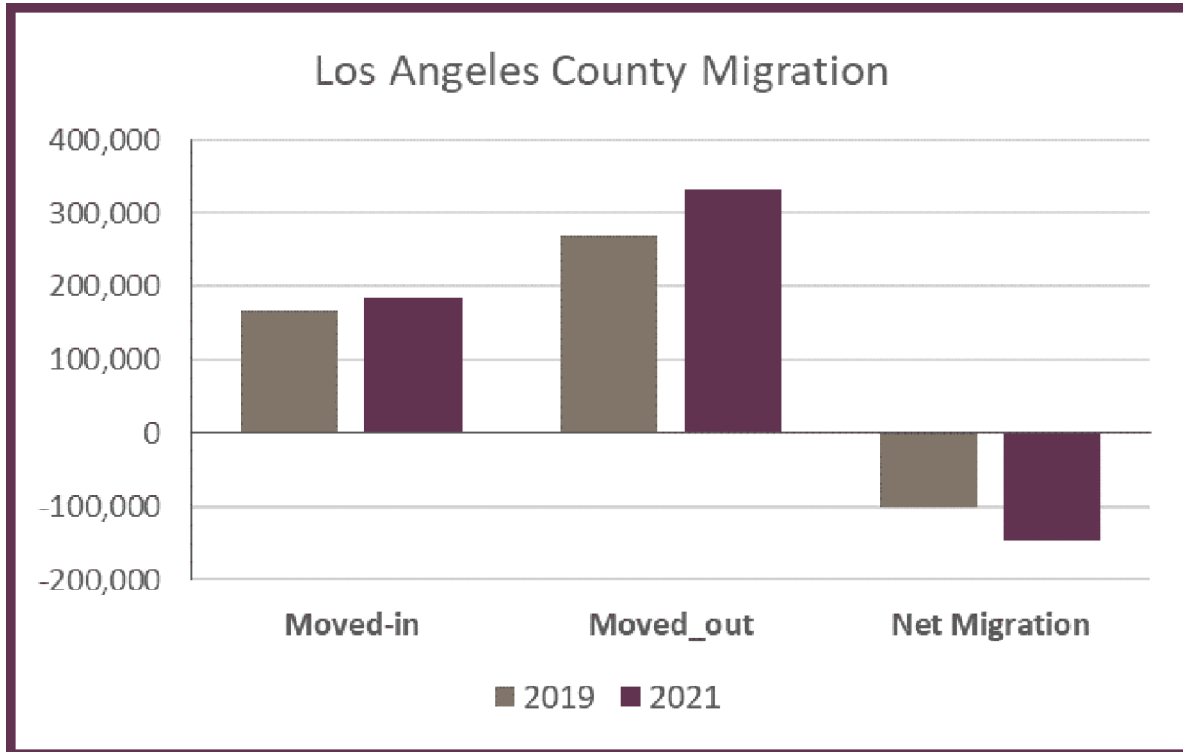
EMPLOYMENT LOCATION QUOTIENTS, 2023 1ST QUARTER

INDUSTRY • LOS ANGELES COUNTY

All industries	1.02
Goods-producing	0.72
Natural resources and mining	0.12
Construction	0.65
Manufacturing	0.84
Service-providing	1.08
Trade, transportation, and utilities	0.97
Information	2.37
Financial activities	0.82
Professional and business services	0.96
Education and health services	1.24
Leisure and hospitality	1.11
Other services	1.13
Unclassified	0.59

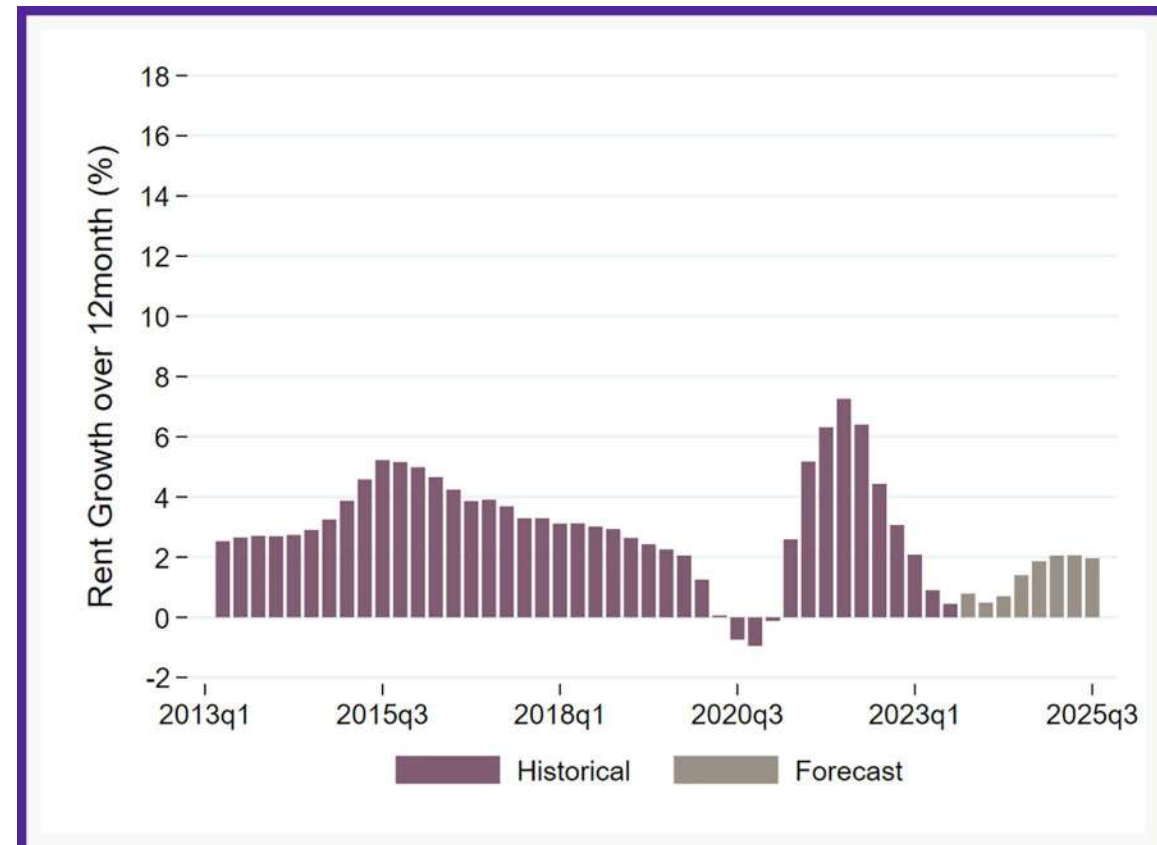
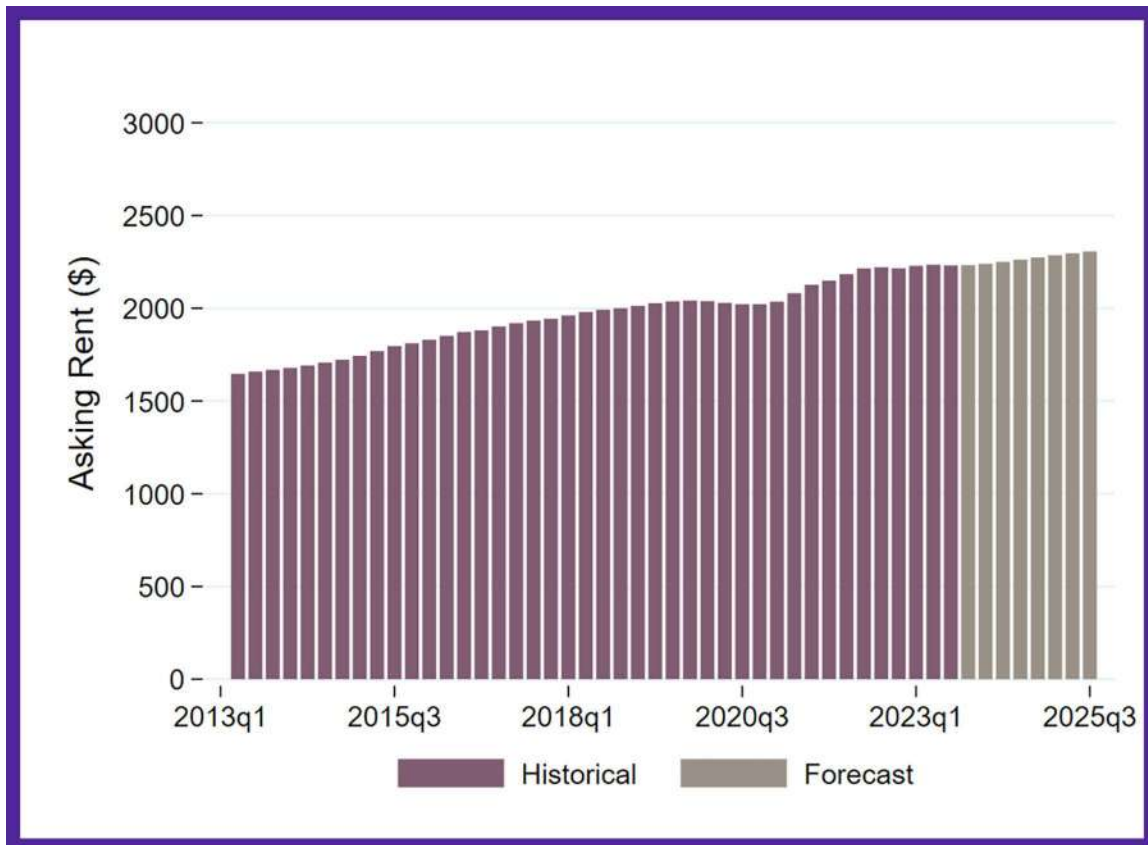
Source: U.S. Bureau of Labor Statistics

Migration - Los Angeles County, 2019 & 2021

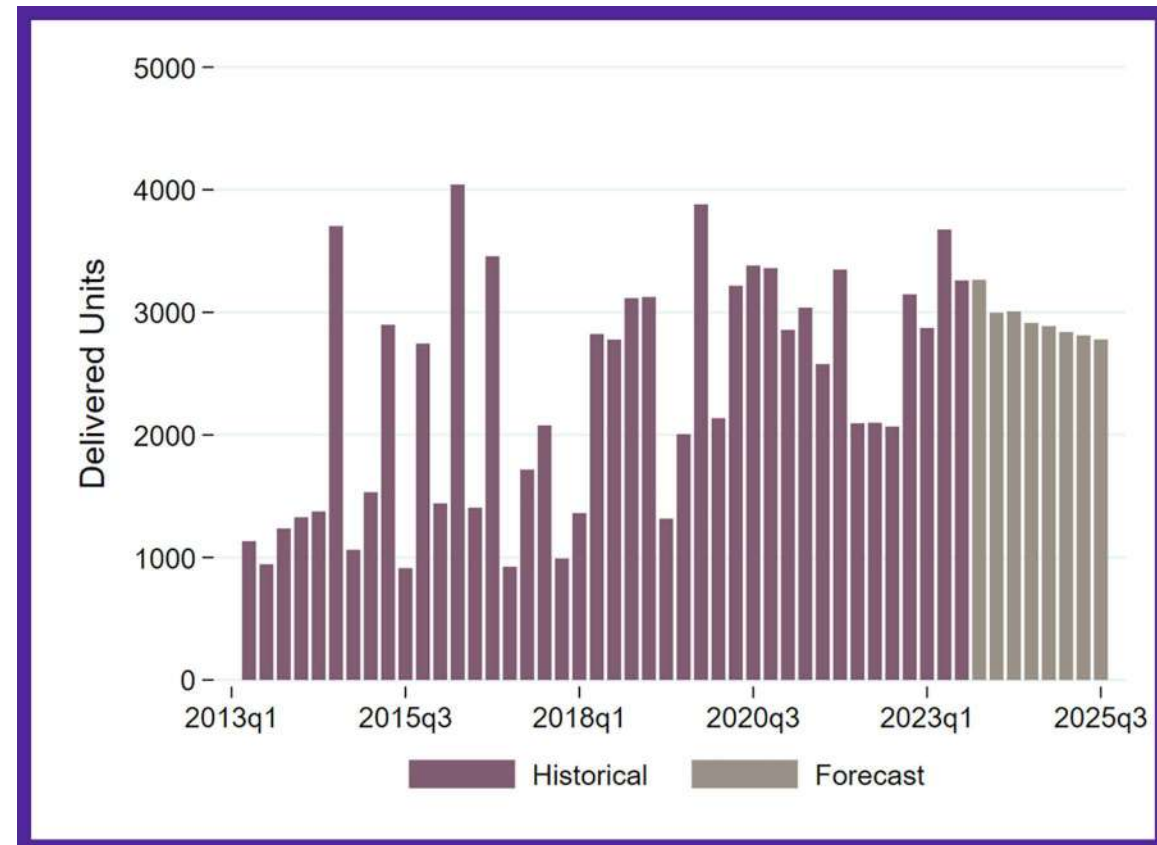
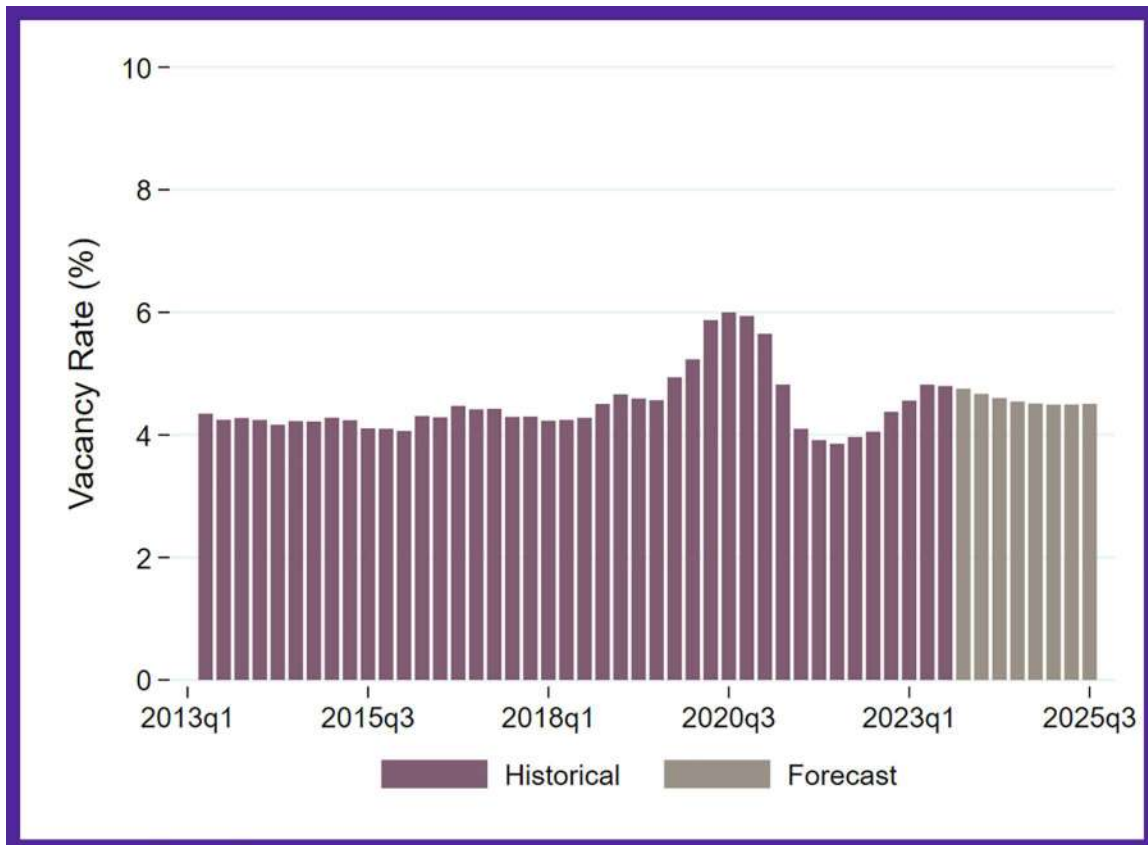


Source: USC Casden forecasts based on CoStar data

Los Angeles County Asking Rents · Rent Growth Los Angeles County, 2013-2025

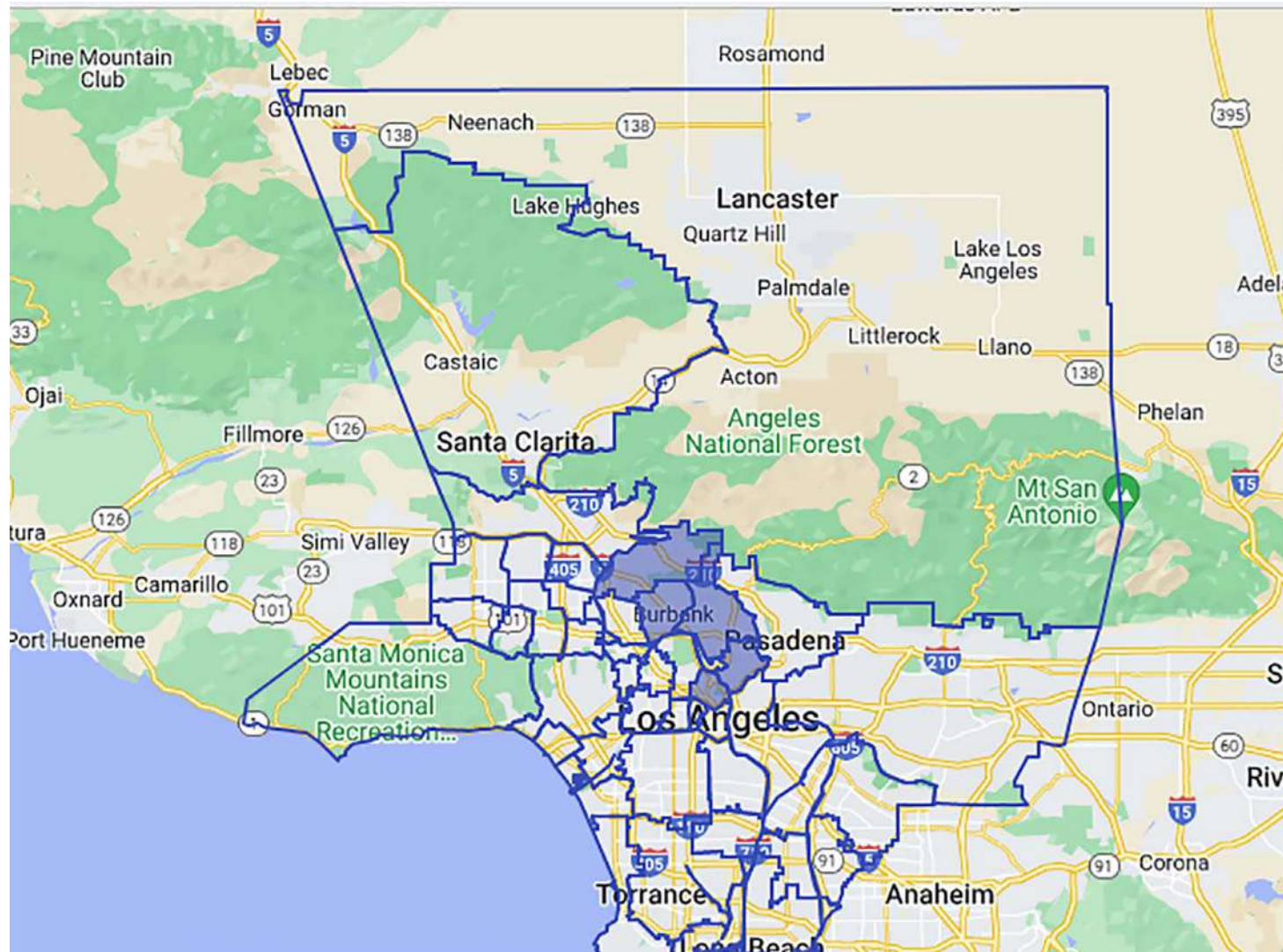


Los Angeles County Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Burbank-Glendale

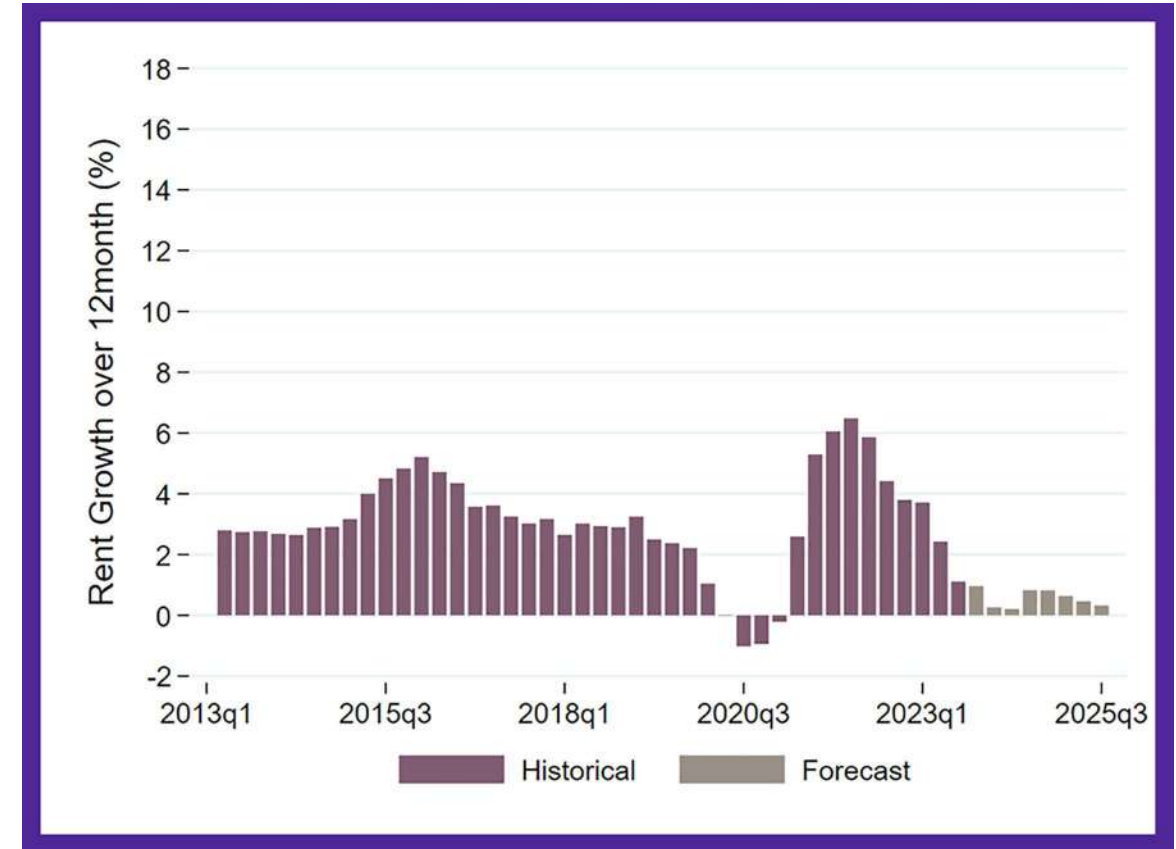
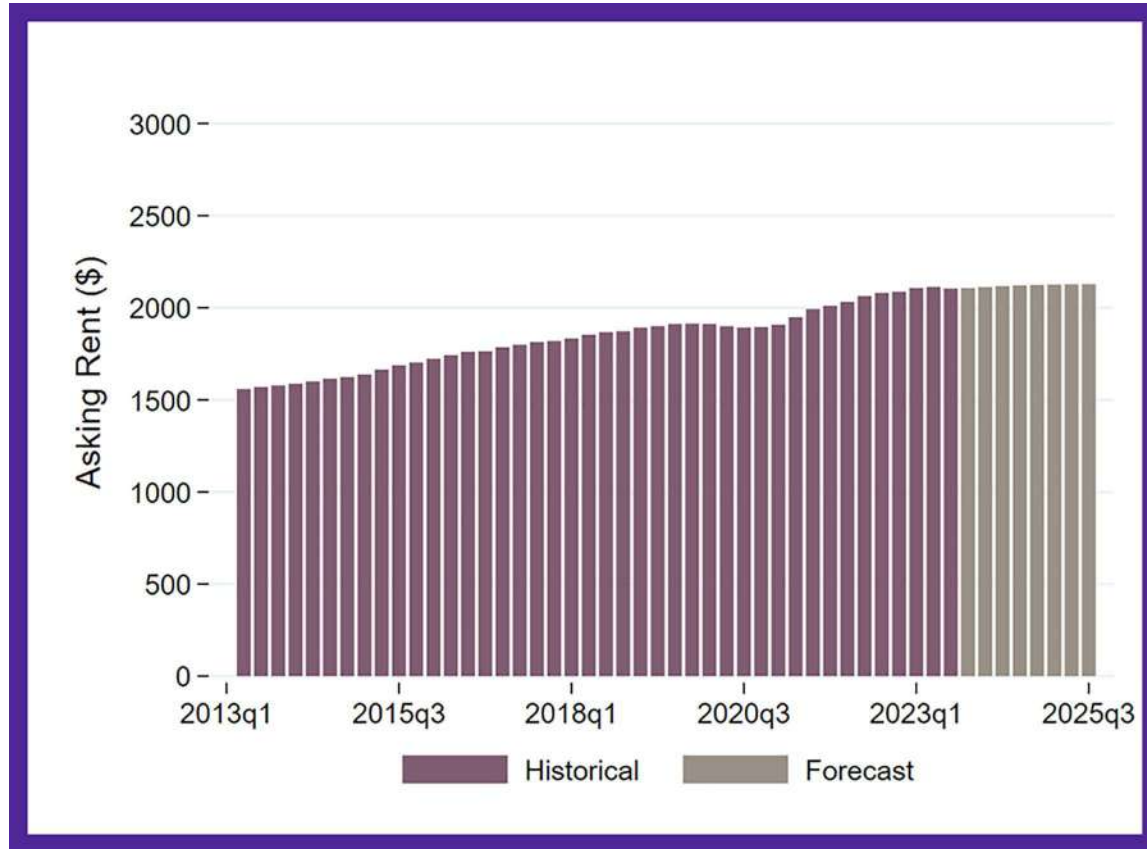


BURBANK-GLENDALE

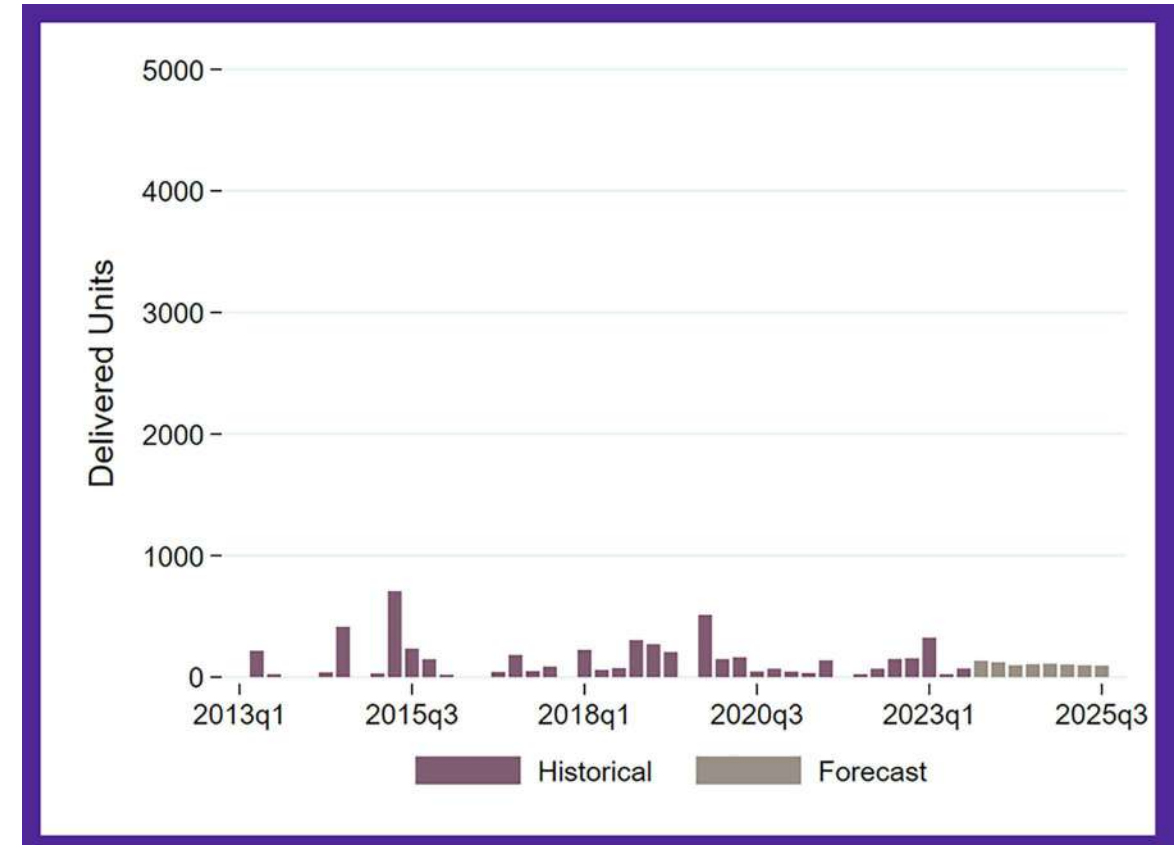
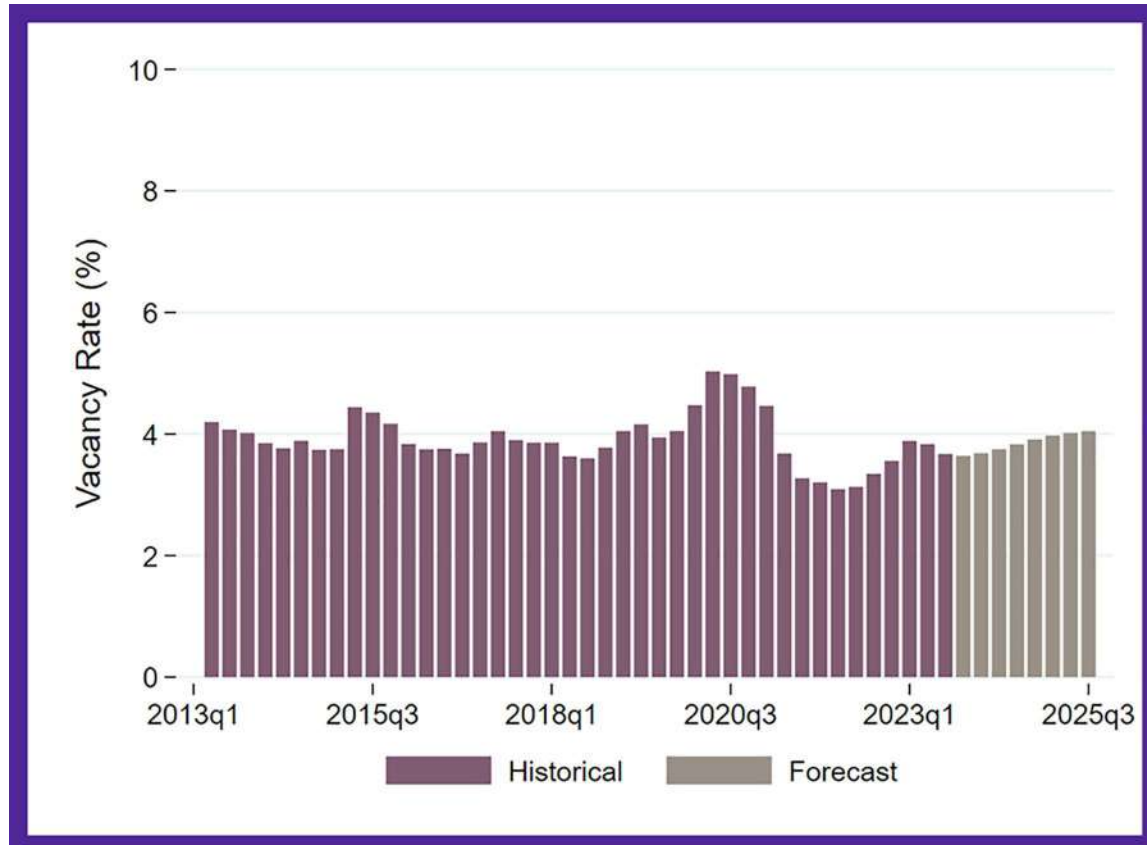
	All	Renters
RACE		
white only(%)	42.39	40.88
black only(%)	2.37	3.34
asian only(%)	13.55	10.16
hispanic(%)	38.06	42.67
other race(%)	3.63	2.95
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	12.02	13.85
highschool diploma, 18 yrs or more(%)	16.76	18.79
some college education, 18 yrs or more(%)	22.39	21.49
bachelors degree, 18 yrs or more(%)	19.57	18.65
more than bachelors degree, 18 yrs or more(%)	10.66	7.91
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		25.77
renter households living in 2-4 unit housing(%)		13.27
renter households living in 5-9 unit housing(%)		16.18
renter households living in 10-19 unit housing(%)		14.42
renter households living in 20+ unit housing(%)		29.92
renter households living in other types of housing(%)		0.44
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		49.87
renter households living in a structure built between 1970 and 1999(%)		40.97
renter households living in a structure built between 2000 and 2009(%)		4.04
renter households living in a structure built between 2010 and 2019(%)		5.02
renter households living in a structure built in 2020 and 2021(%)		0.10
HOUSEHOLD STATISTICS		
share of renter households(%)	54.75	
share of renter households living in multifamily structure(%)		60.52
share of rent-burdened households(%)		57.71
share of households with children(%)	41.22	37.35
average household size	2.79	2.58
median household income	\$79,922	\$56,646
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.70	89.33
population who moved within CA last year(%)	7.18	8.46
population who moved from other states to CA last year(%)	0.88	1.13
population who moved from abroad last year(%)	0.57	0.59

Source: 2021 1-Year American Community Survey

Burbank-Glendale Market · Asking Rents · Rent Growth · Los Angeles County, 2013-2025

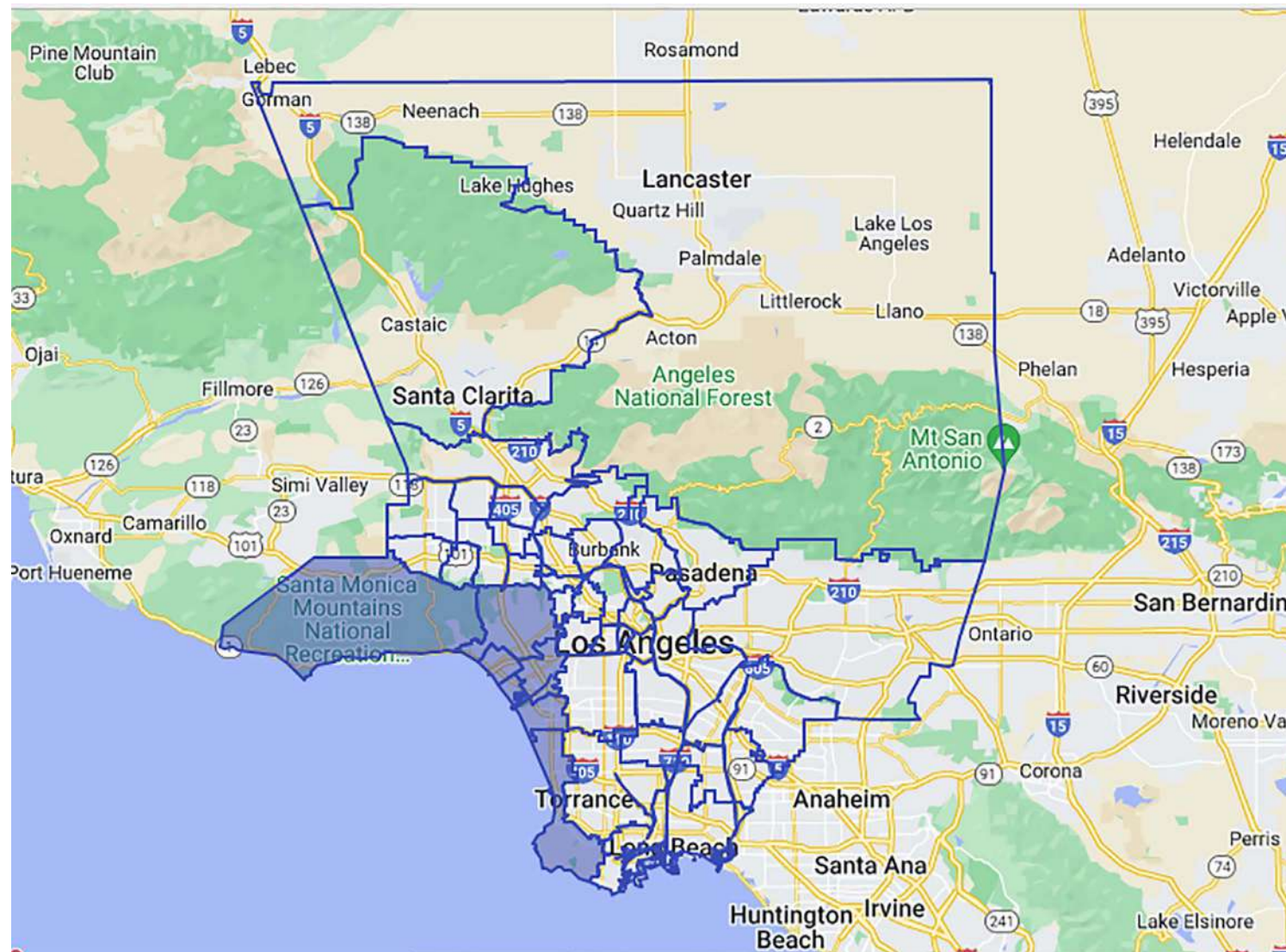


Burbank-Glendale Market · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Coastal Communities-Beverly Hills

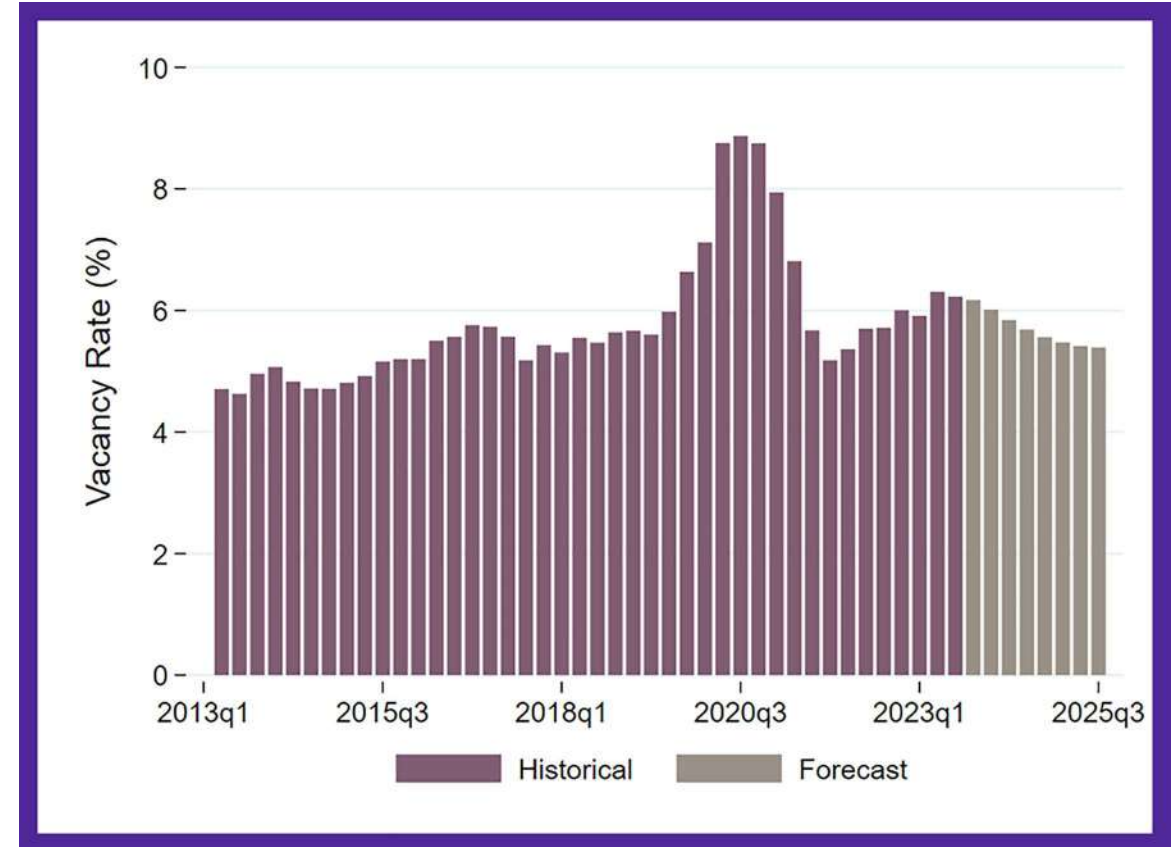
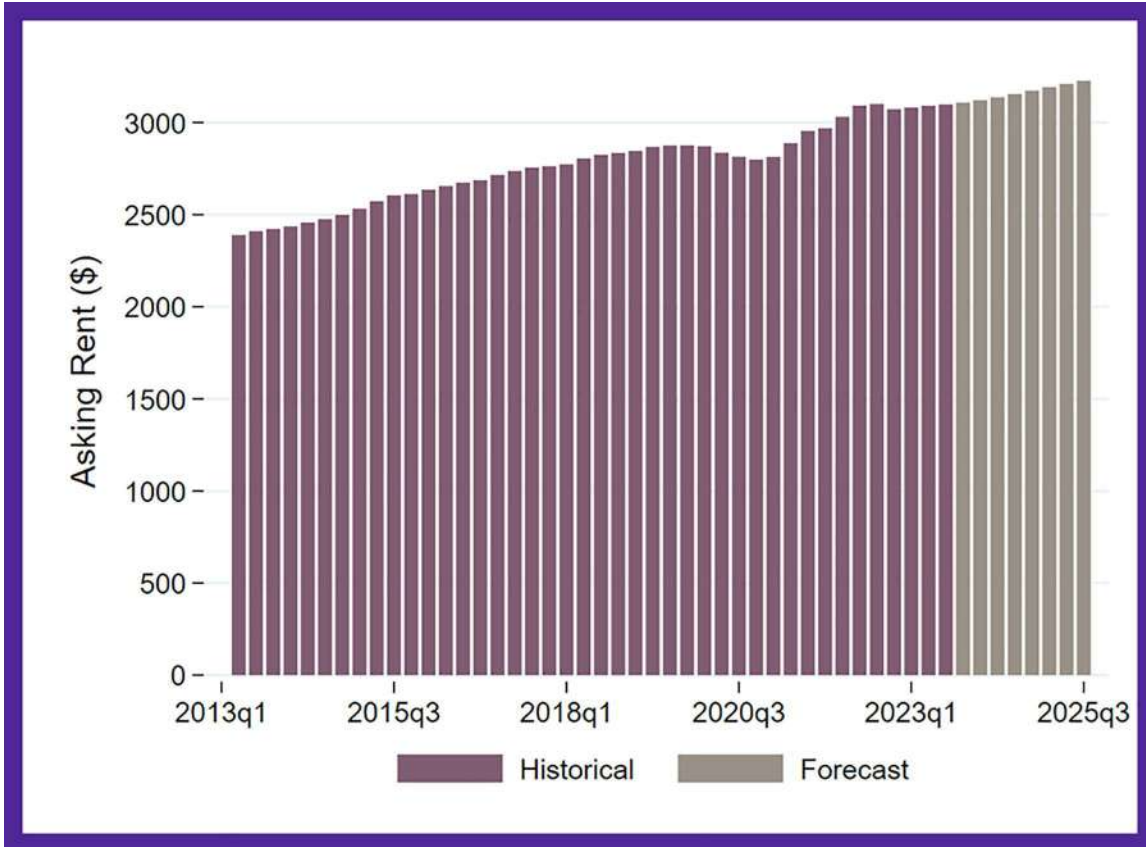


COASTAL COMMUNITIES-BEVERLY HILLS

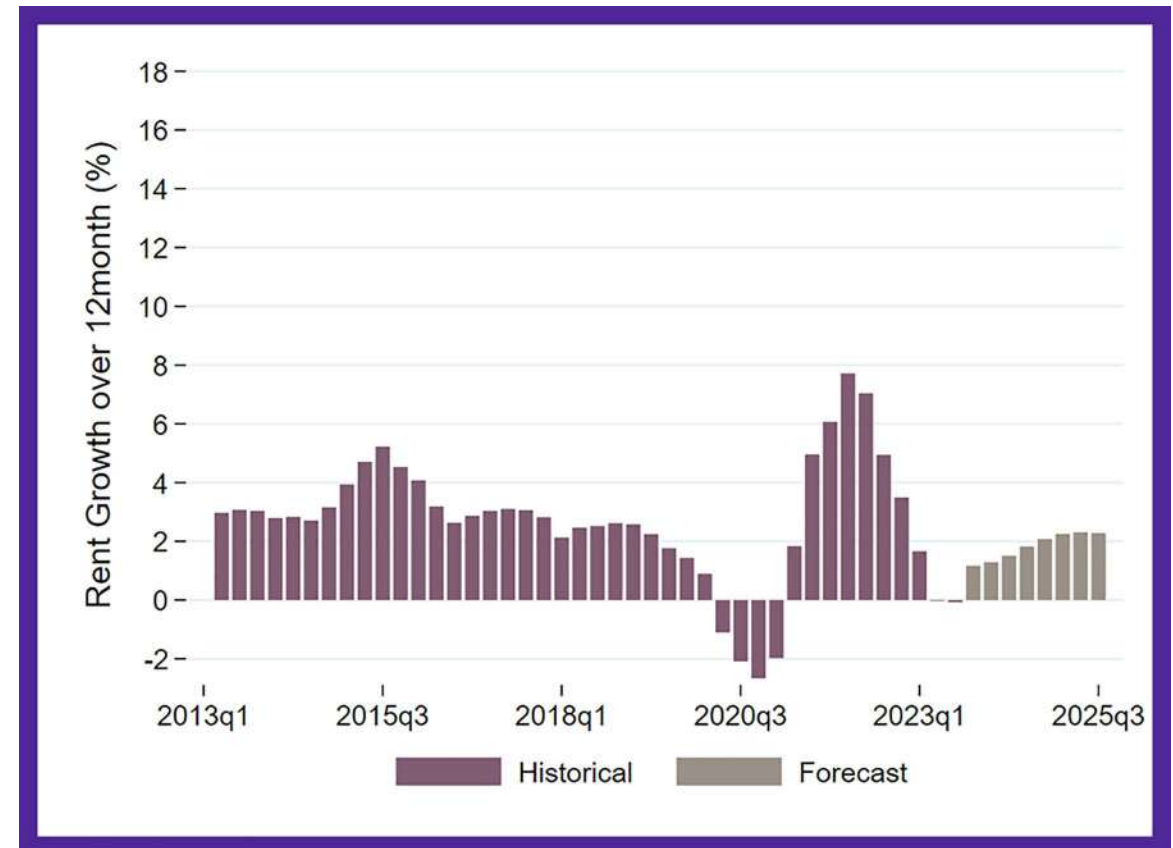
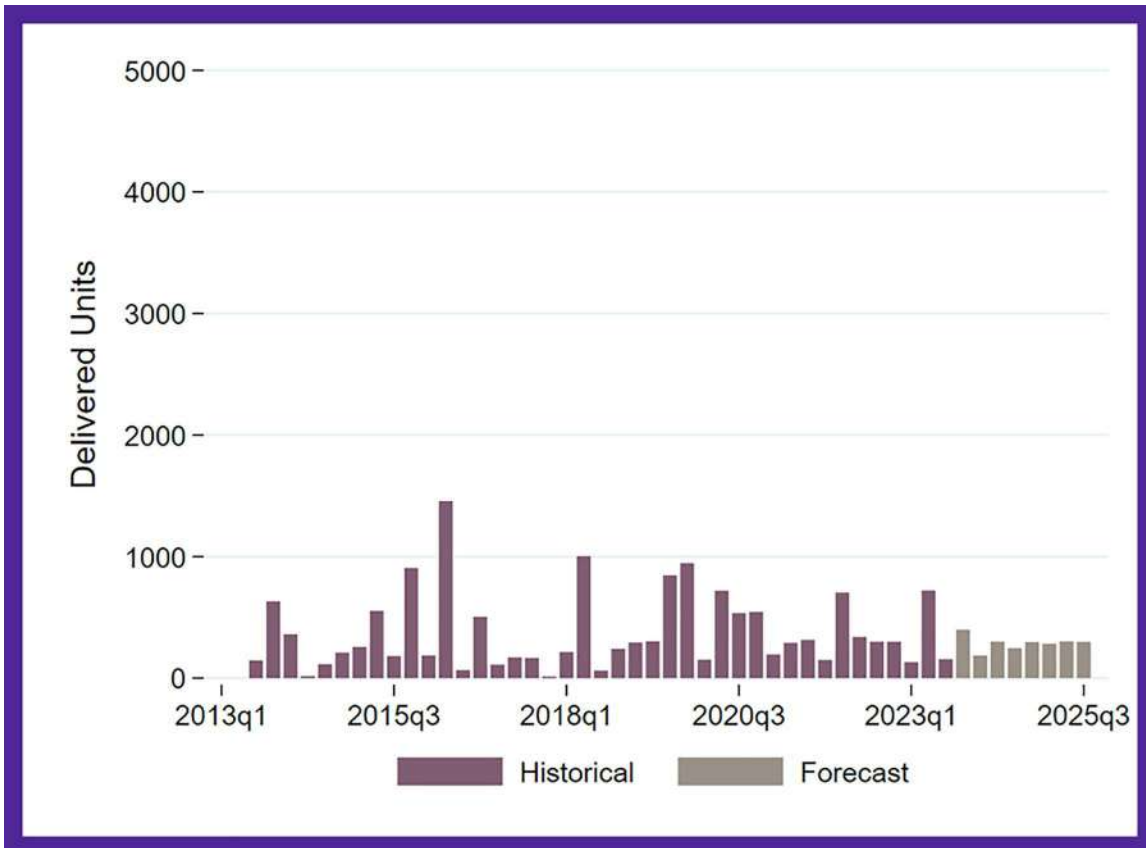
	All	Renters
RACE		
white only(%)	57.31	52.19
black only(%)	5.13	6.59
asian only(%)	14.09	11.25
hispanic(%)	15.52	22.01
other race(%)	7.95	7.96
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	3.67	5.11
highschool diploma, 18 yrs or more(%)	8.15	8.35
some college education, 18 yrs or more(%)	19.57	20.33
bachelors degree, 18 yrs or more(%)	29.46	32.40
more than bachelors degree, 18 yrs or more(%)	21.28	17.58
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		17.25
renter households living in 2-4 unit housing(%)		10.03
renter households living in 5-9 unit housing(%)		17.06
renter households living in 10-19 unit housing(%)		16.62
renter households living in 20+ unit housing(%)		38.67
renter households living in other types of housing(%)		0.37
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		41.89
renter households living in a structure built between 1970 and 1999(%)		41.05
renter households living in a structure built between 2000 and 2009(%)		7.72
renter households living in a structure built between 2010 and 2019(%)		8.91
renter households living in a structure built in 2020 and 2021(%)		0.43
HOUSEHOLD STATISTICS		
share of renter households(%)	51.10	
share of renter households living in multifamily structure(%)		72.35
share of rent-burdened households(%)		51.60
share of households with children(%)	29.89	20.64
average household size	2.31	2.00
median household income	\$113,292	\$87,544
MIGRATION STATISTICS		
population living in the same house for over a year(%)	83.57	76.16
population who moved within CA last year(%)	12.95	18.67
population who moved from other states to CA last year(%)	2.10	3.34
population who moved from abroad last year(%)	0.52	0.73

Source: 2021 1-Year American Community Survey

Coastal Communities-Beverly Hills Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

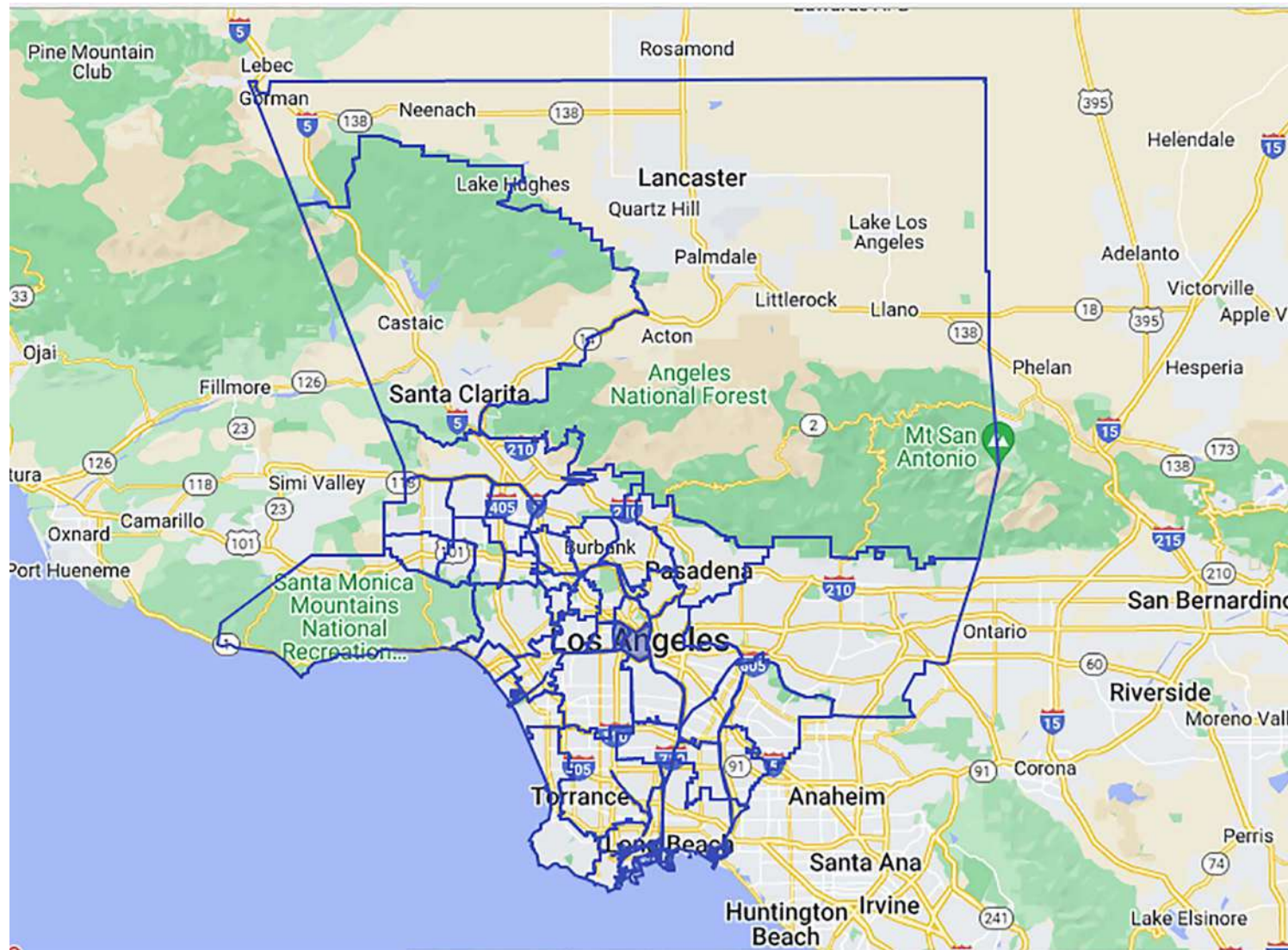


Coastal Communities-Beverly Hills Market · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Downtown Los Angeles

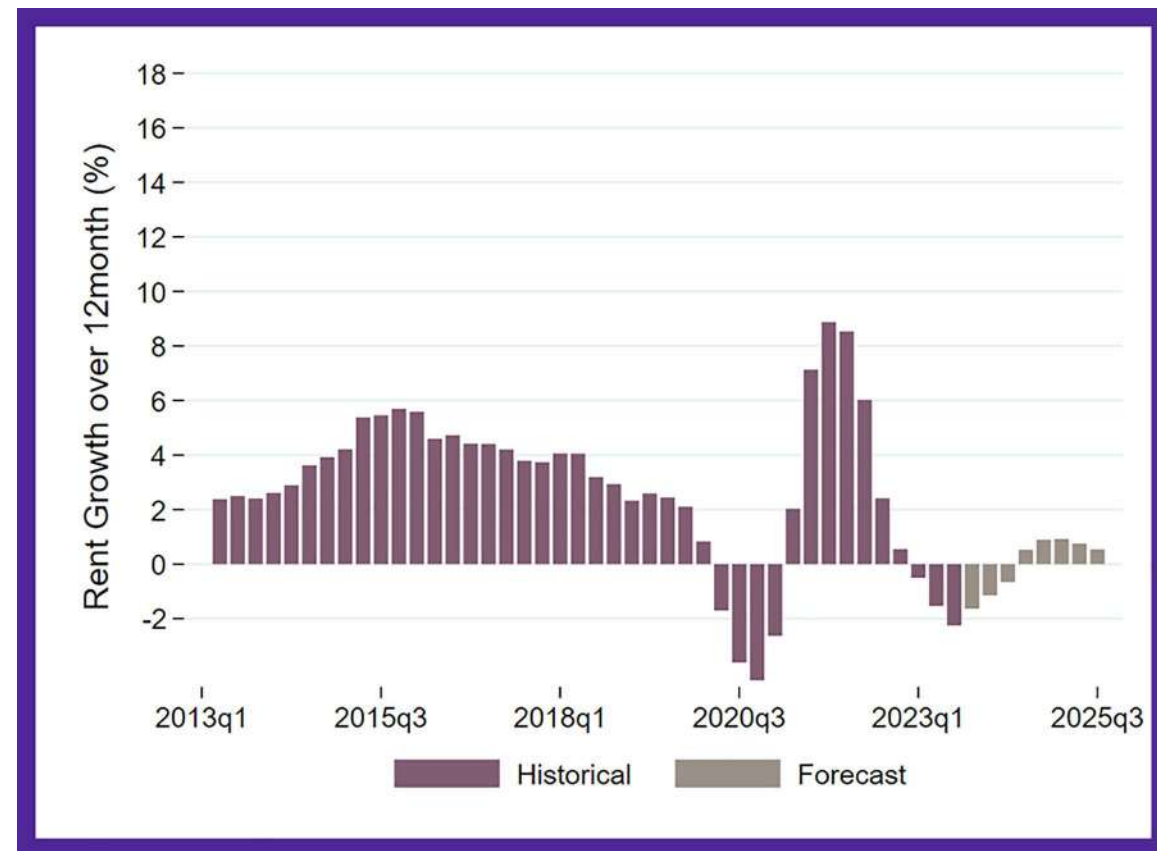
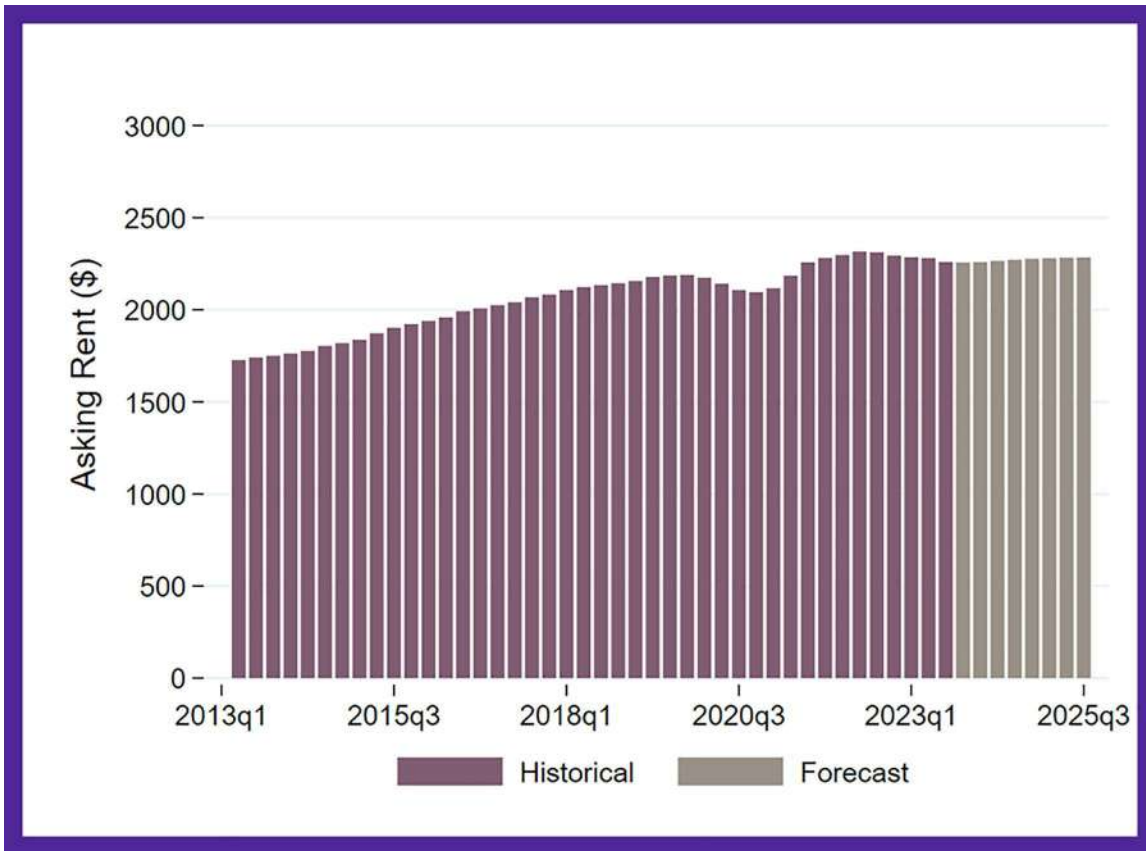


DOWNTOWN

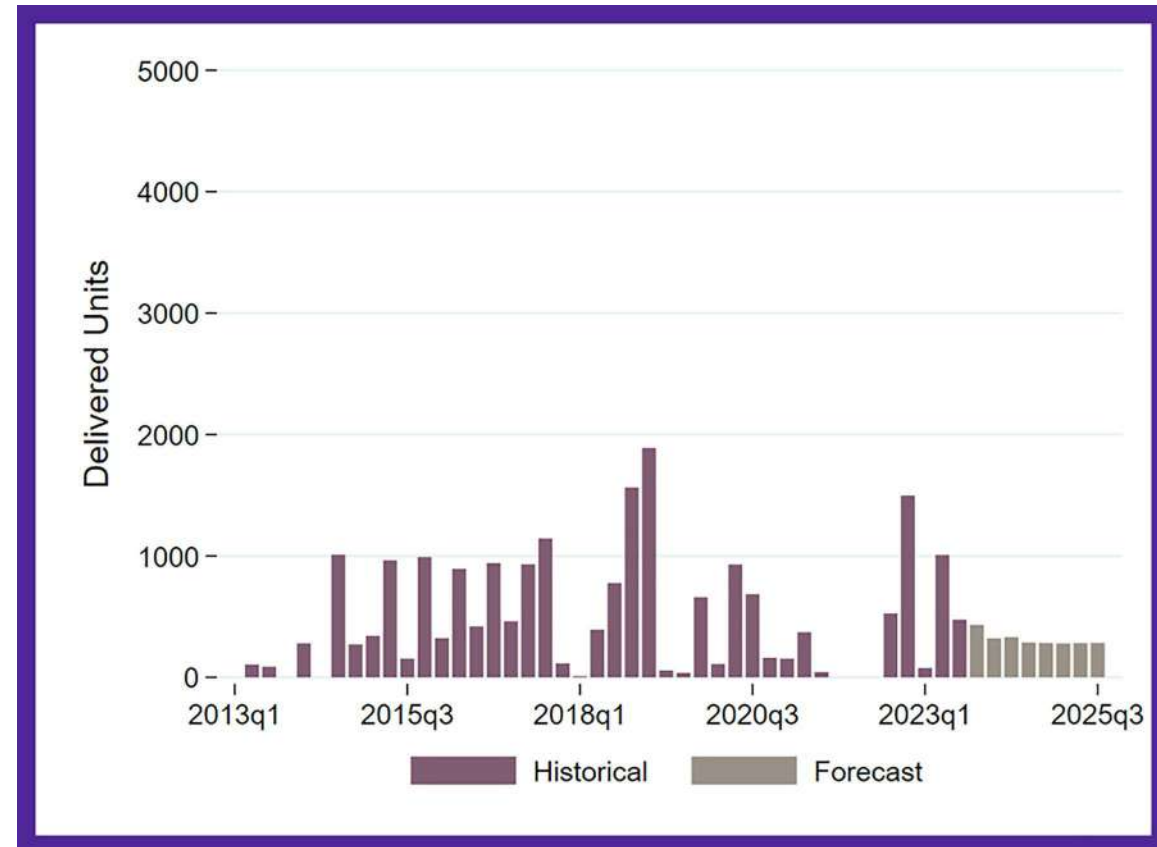
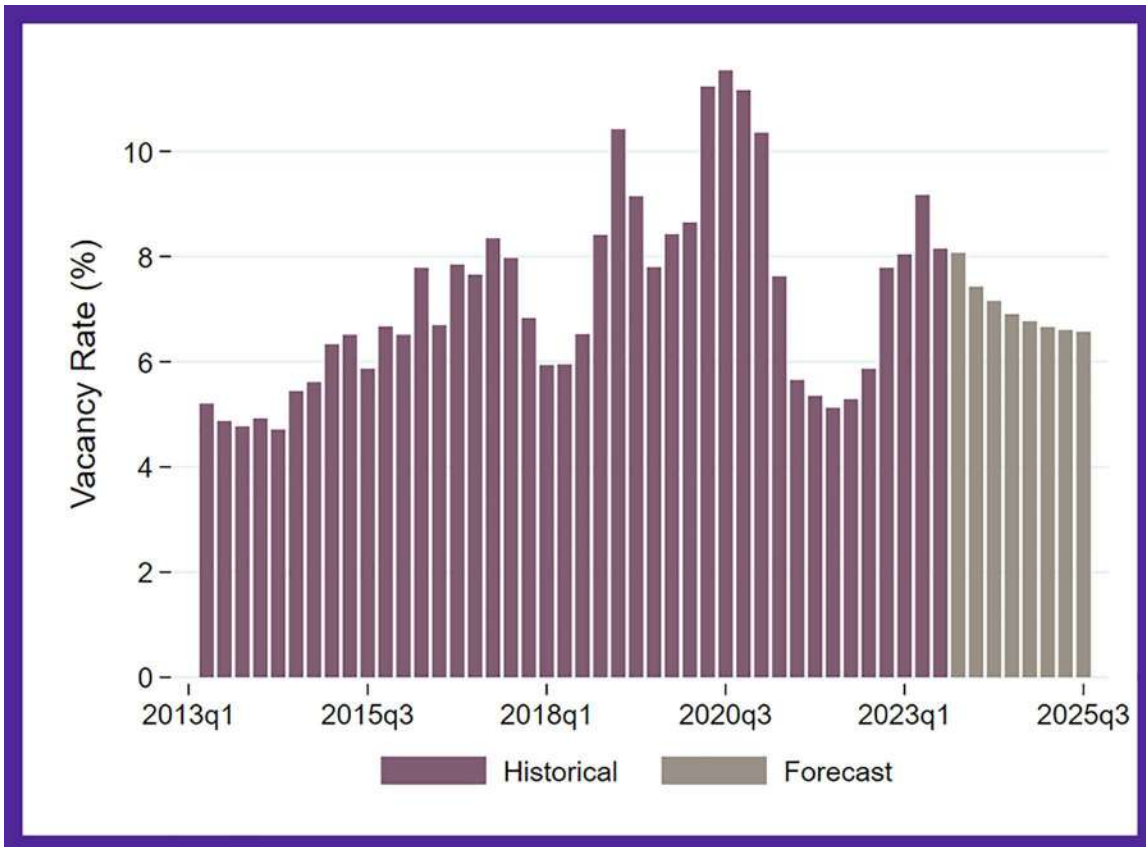
	ALL	RENTERS
RACE		
white only(%)	23.12	18.10
black only(%)	5.09	5.42
asian only(%)	14.64	11.89
hispanic(%)	52.98	61.57
other race(%)	4.16	3.02
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	21.46	24.12
highschool diploma, 18 yrs or more(%)	15.04	15.91
some college education, 18 yrs or more(%)	17.54	17.41
bachelors degree, 18 yrs or more(%)	21.02	19.22
more than bachelors degree, 18 yrs or more(%)	8.19	5.95
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		14.90
renter households living in 2-4 unit housing(%)		12.97
renter households living in 5-9 unit housing(%)		11.44
renter households living in 10-19 unit housing(%)		12.55
renter households living in 20+ unit housing(%)		48.14
renter households living in other types of housing(%)		0.00
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		56.92
renter households living in a structure built between 1970 and 1999(%)		29.71
renter households living in a structure built between 2000 and 2009(%)		6.06
renter households living in a structure built between 2010 and 2019(%)		6.89
renter households living in a structure built in 2020 and 2021(%)		0.43
HOUSEHOLD STATISTICS		
share of renter households(%)	81.92	
share of renter households living in multifamily structure(%)		72.13
share of rent-burdened households(%)		56.78
share of households with children(%)	29.80	26.92
average household size	2.48	2.38
median household income	\$55,276	\$49,643
MIGRATION STATISTICS		
population living in the same house for over a year(%)	87.18	87.67
population who moved within CA last year(%)	9.33	8.63
population who moved from other states to CA last year(%)	1.78	1.87
population who moved from abroad last year(%)	0.29	0.36

Source: 2021 1-Year American Community Survey

Downtown Market - Asking Rents - Rent Growth Los Angeles County, 2013-2025

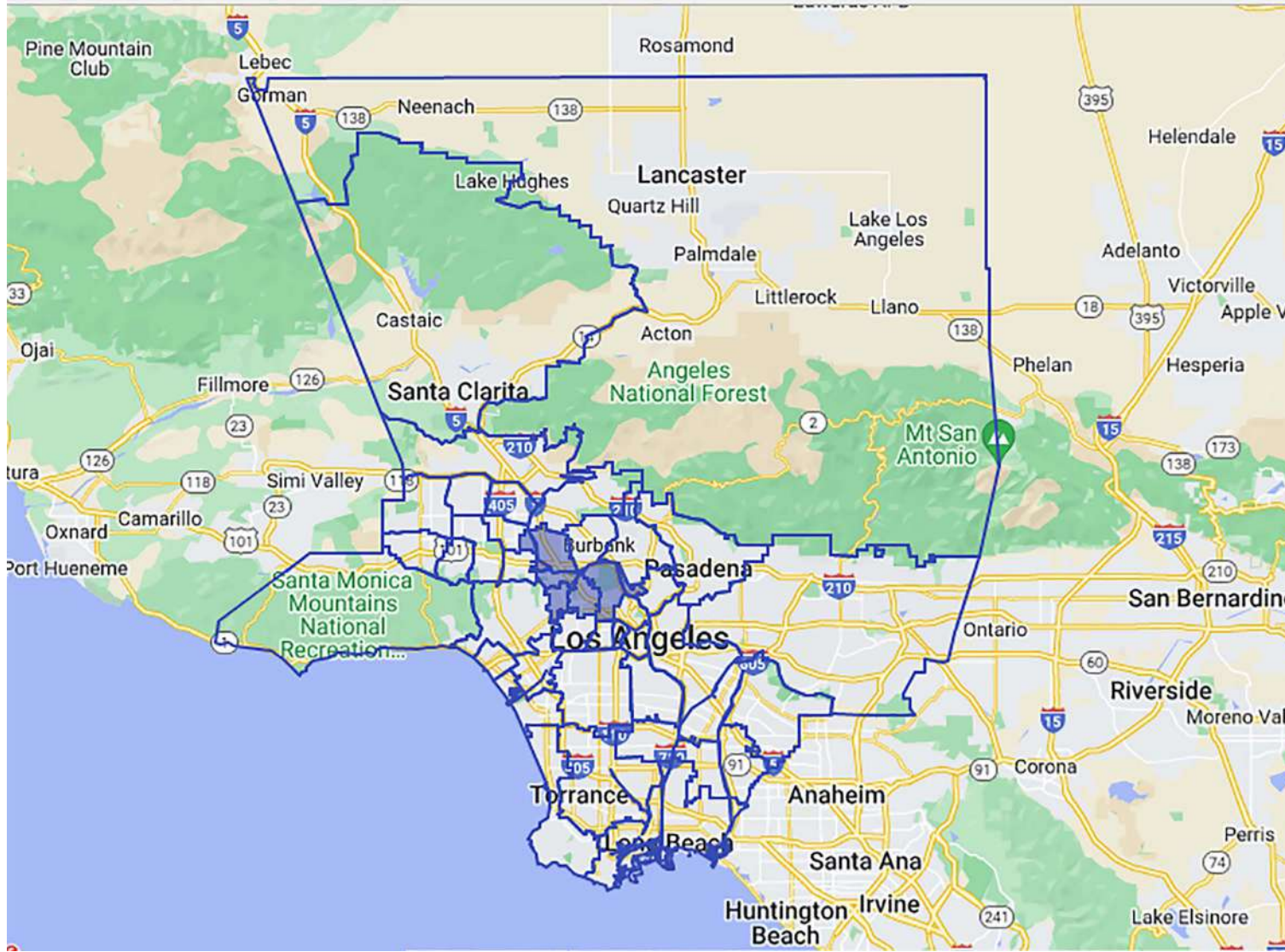


Downtown - Vacancy - Delivered Units - Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Hollywood-Studio City

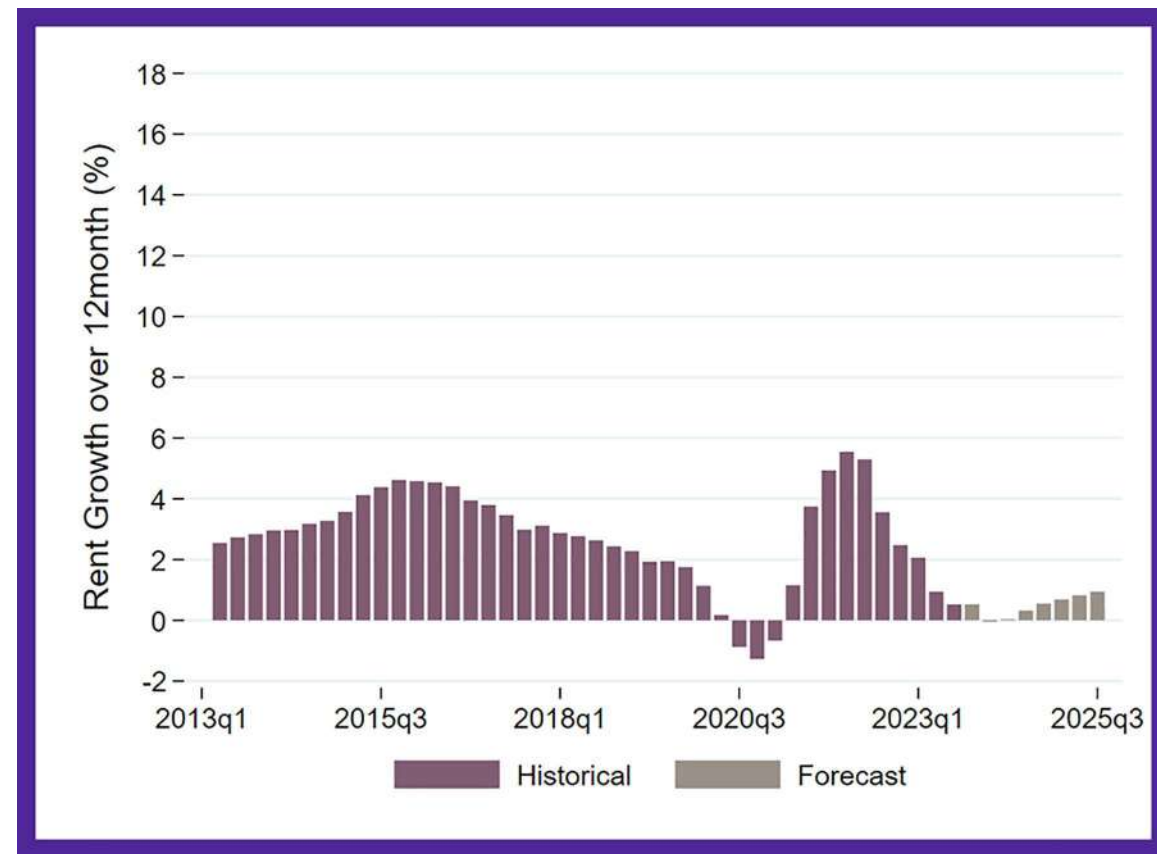
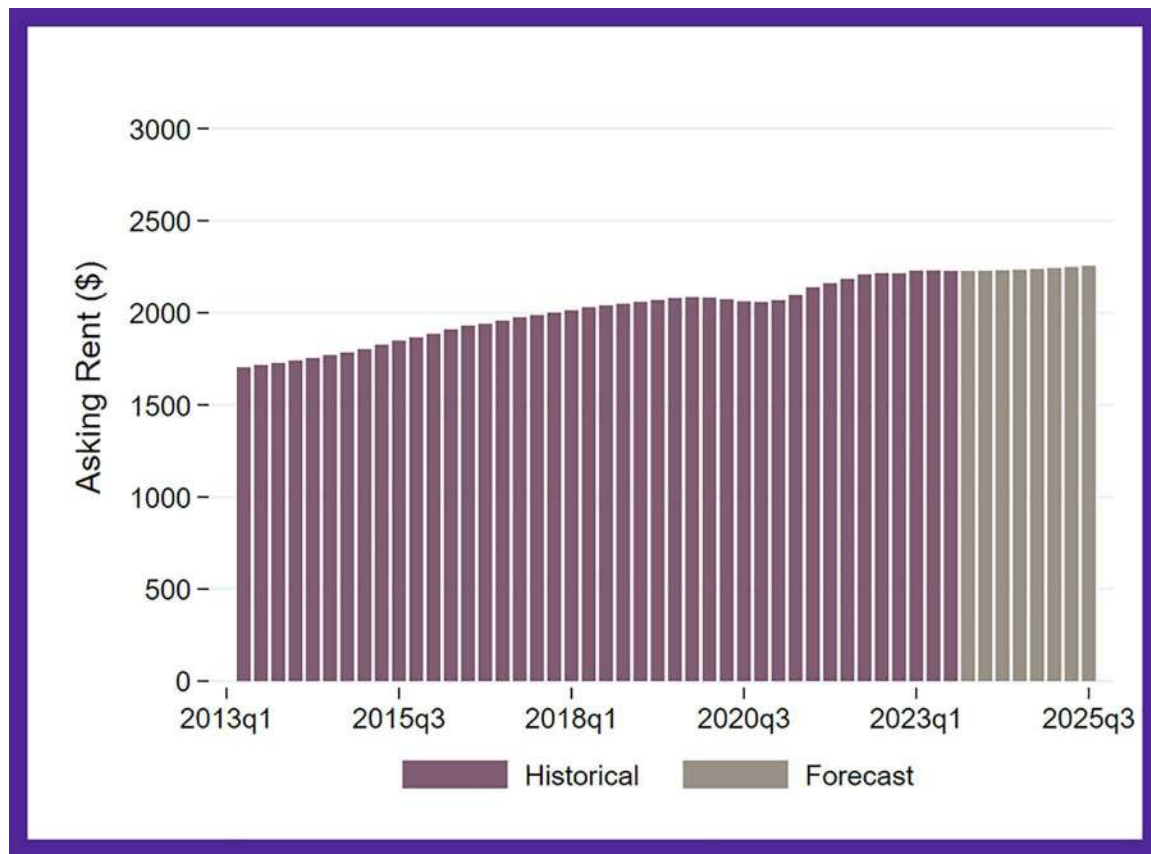


HOLLYWOOD-STUDIO CITY

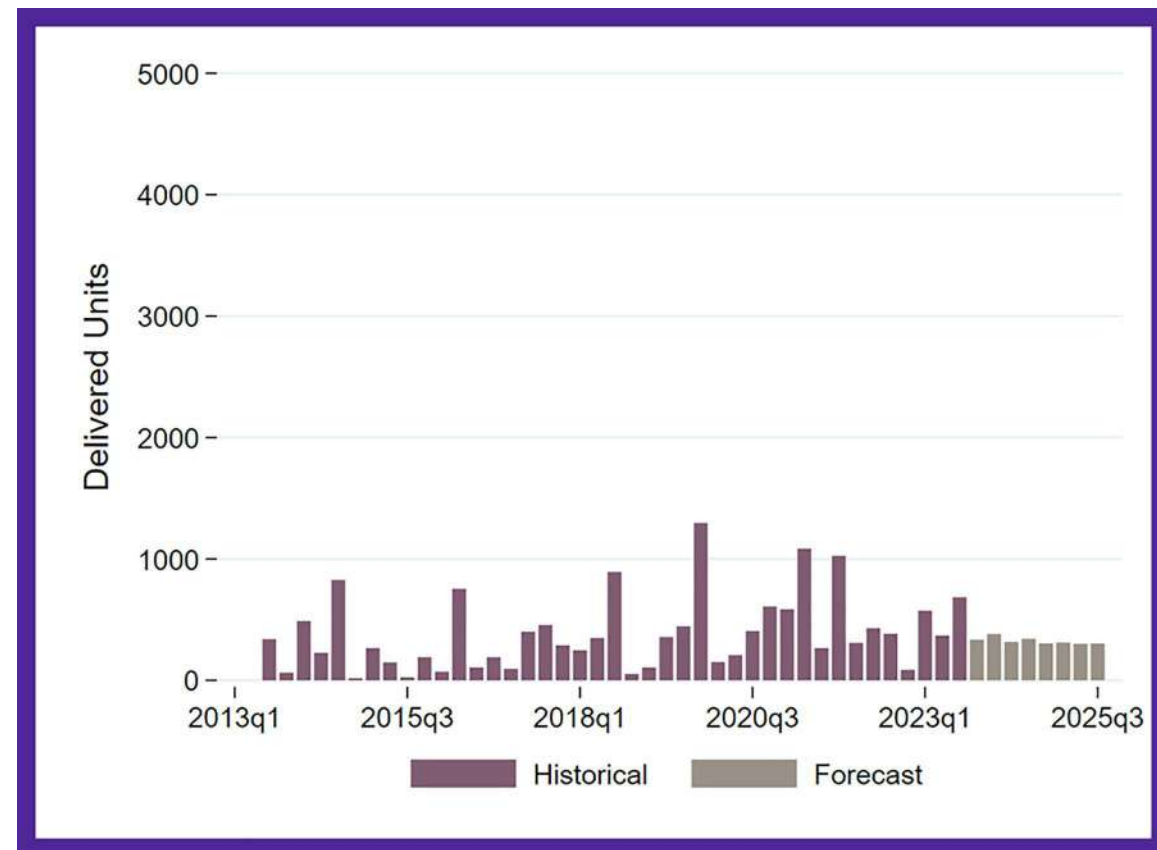
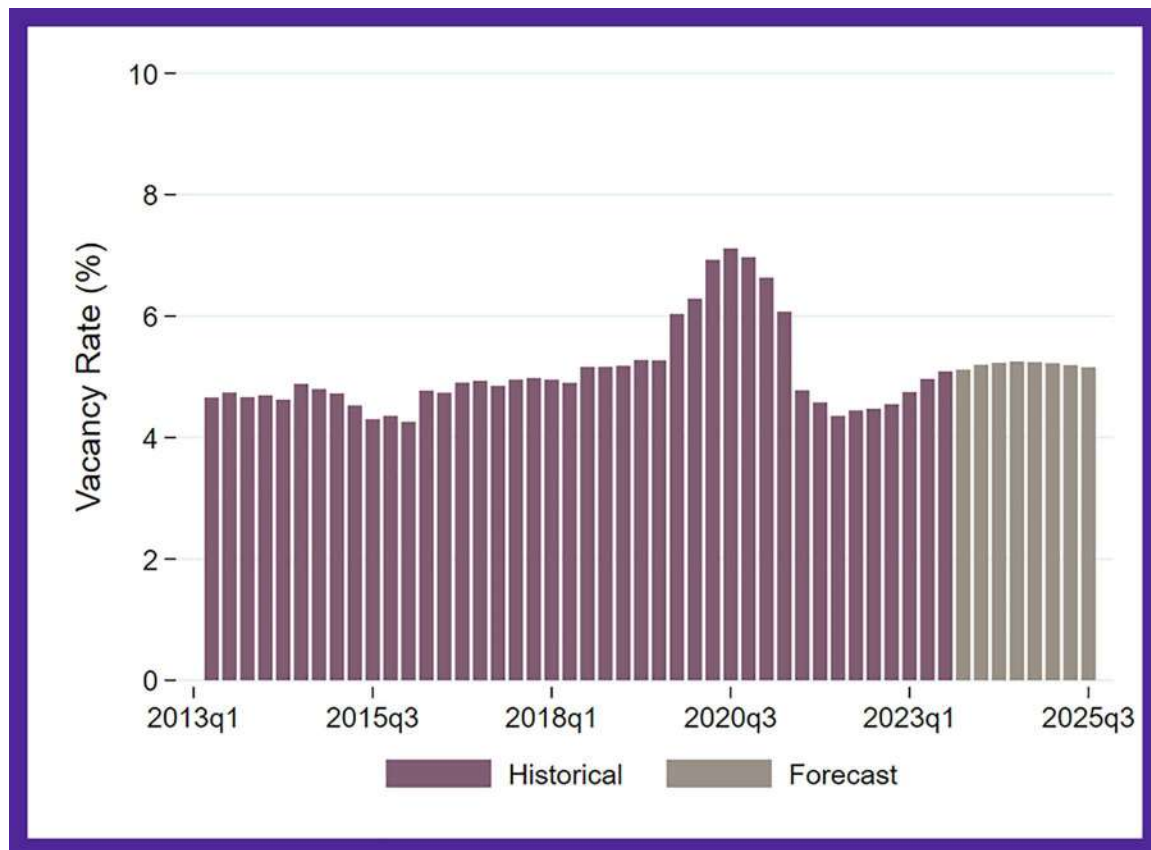
	ALL	RENTERS
RACE		
white only(%)	47.42	42.69
black only(%)	5.93	6.31
asian only(%)	9.41	8.89
hispanic(%)	31.40	36.59
other race(%)	5.83	5.53
EDUCATION		
LESS THAN HIGH SCHOOL DIPLOMA, 18 YRS OR MORE(%)	11.35	13.41
highschool diploma, 18 yrs or more(%)	13.52	13.29
some college education, 18 yrs or more(%)	21.04	20.88
bachelors degree, 18 yrs or more(%)	27.45	28.47
more than bachelors degree, 18 yrs or more(%)	12.61	10.46
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		10.34
renter households living in 2-4 unit housing(%)		9.95
renter households living in 5-9 unit housing(%)		17.25
renter households living in 10-19 unit housing(%)		21.14
renter households living in 20+ unit housing(%)		40.98
renter households living in other types of housing(%)		0.34
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		52.09
renter households living in a structure built between 1970 and 1999(%)		36.31
renter households living in a structure built between 2000 and 2009(%)		4.50
renter households living in a structure built between 2010 and 2019(%)		6.72
renter households living in a structure built in 2020 and 2021(%)		0.38
HOUSEHOLD STATISTICS		
share of renter households(%)	77.10	
share of renter households living in multifamily structure(%)		79.37
share of rent-burdened households(%)		56.77
share of households with children(%)	23.28	20.34
average household size	2.11	1.97
median household income	\$64,885	\$54,586
MIGRATION STATISTICS		
population living in the same house for over a year(%)	83.77	80.79
population who moved within CA last year(%)	11.74	13.67
population who moved from other states to CA last year(%)	2.73	3.56
population who moved from abroad last year(%)	0.86	1.17

Source: 2021 1-Year American Community Survey

Hollywood-Studio City Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

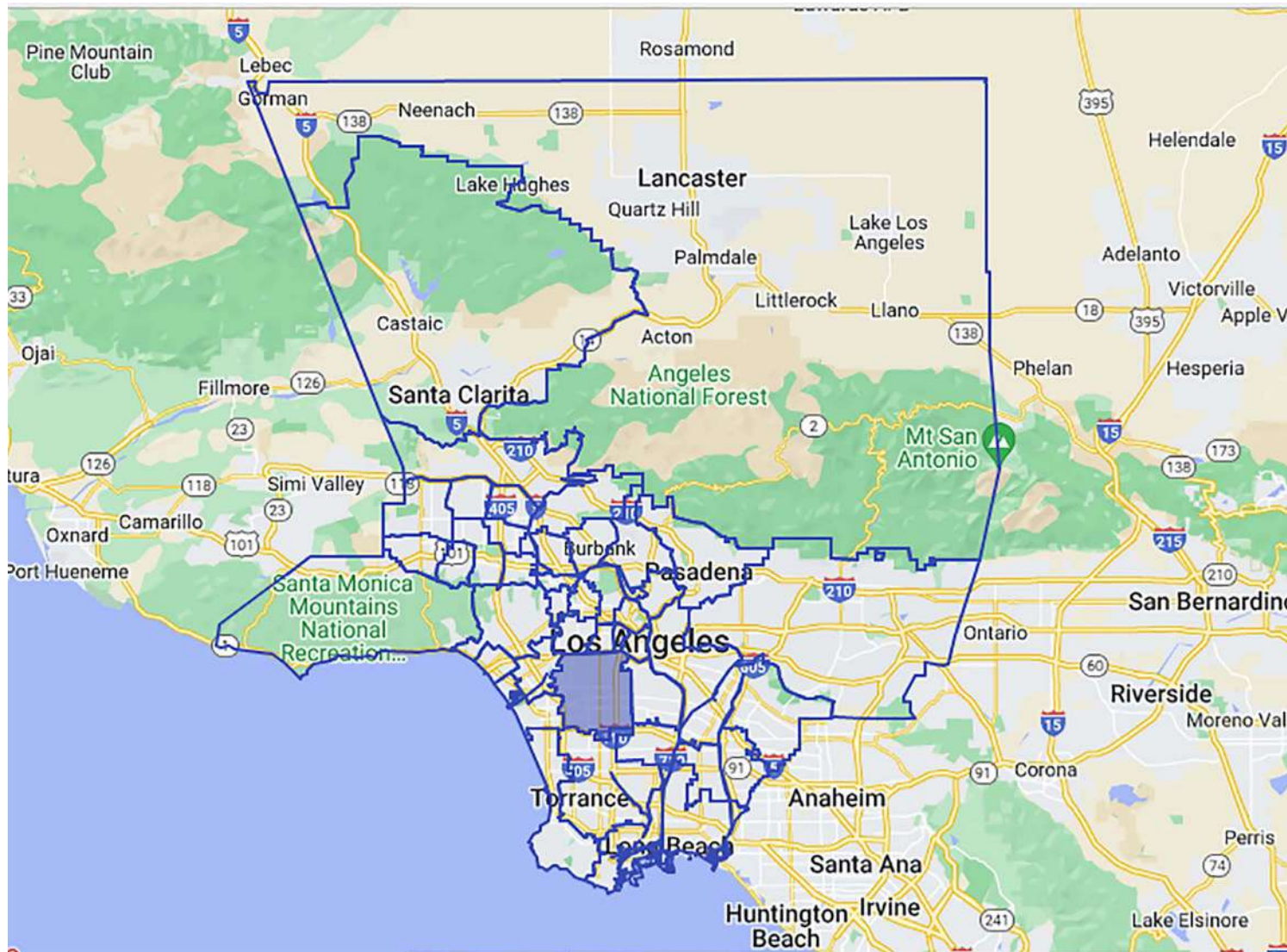


Hollywood-Studio City · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Inglewood

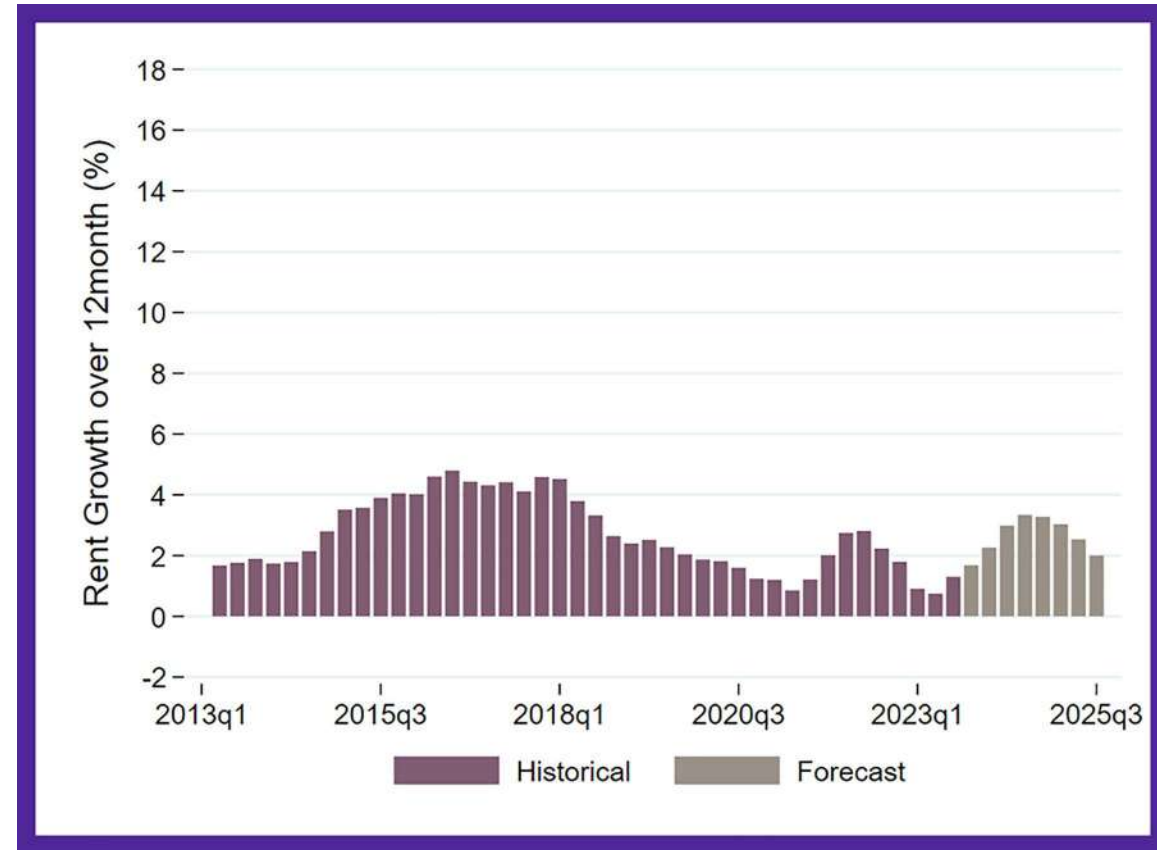
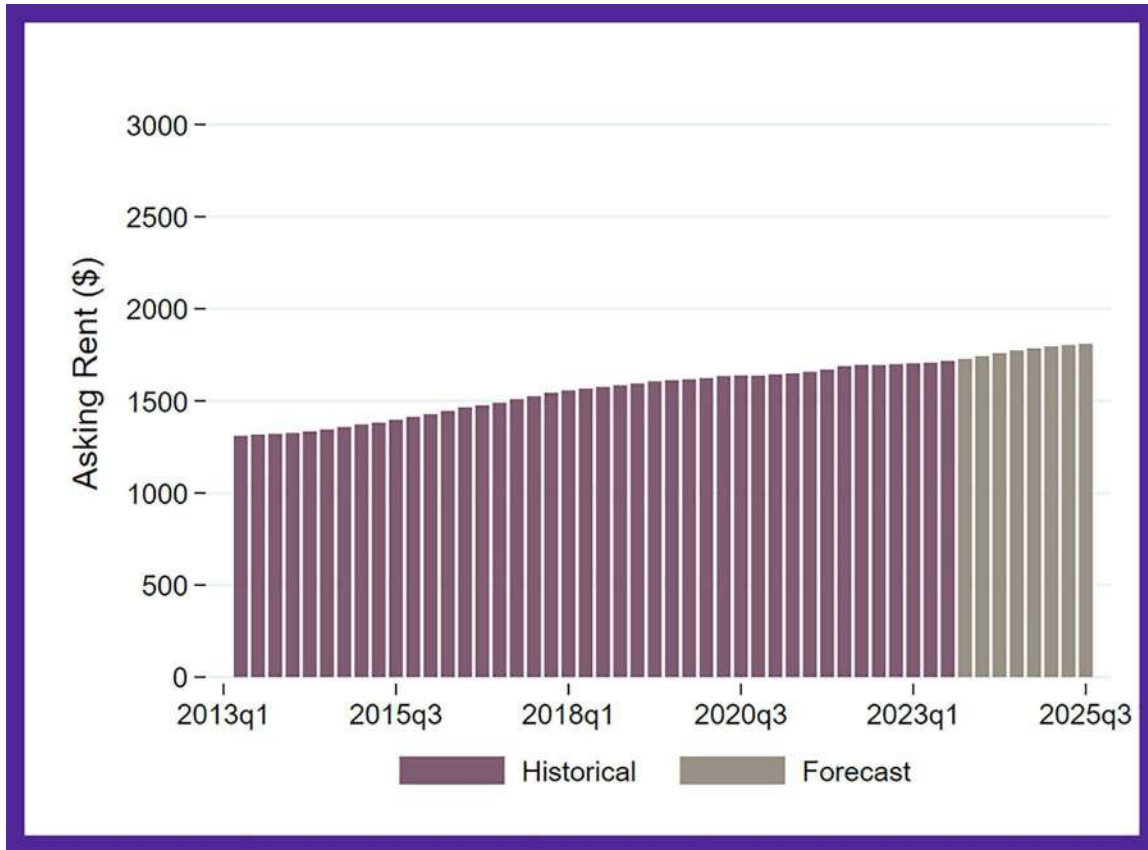


INGLEWOOD

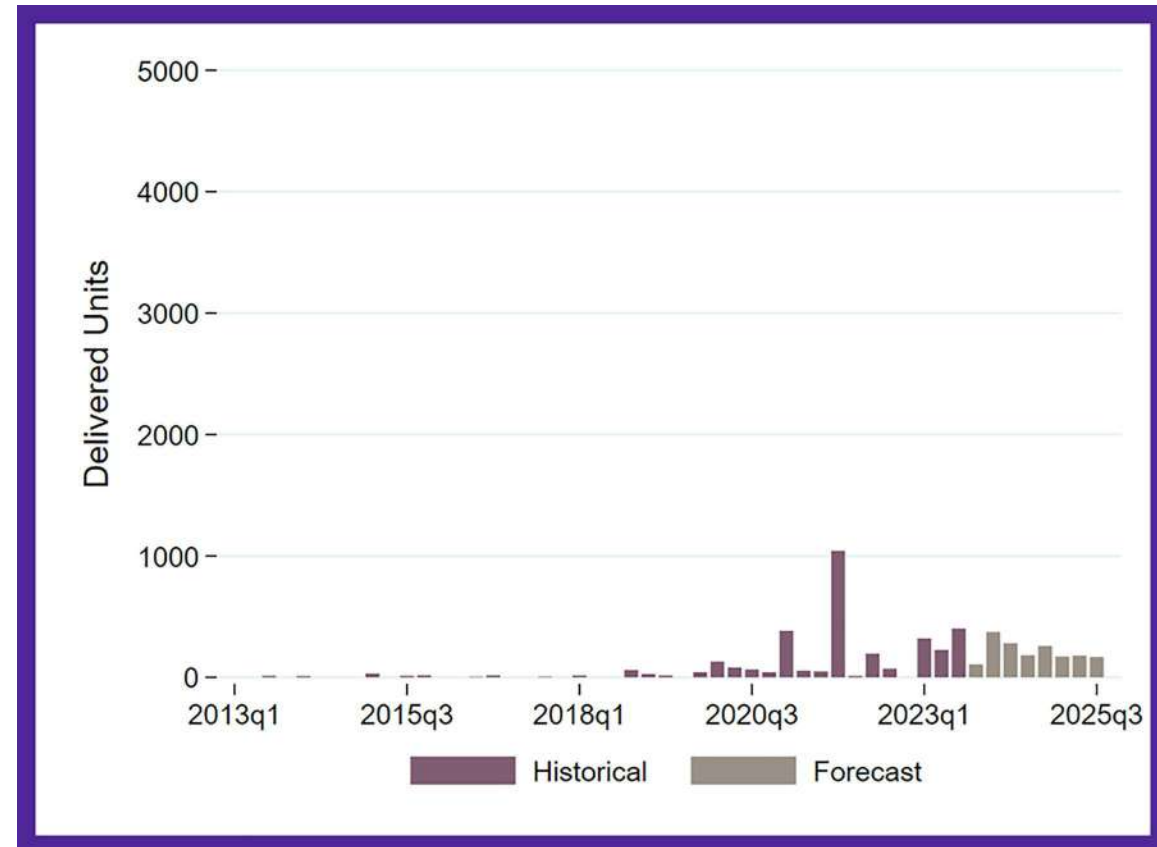
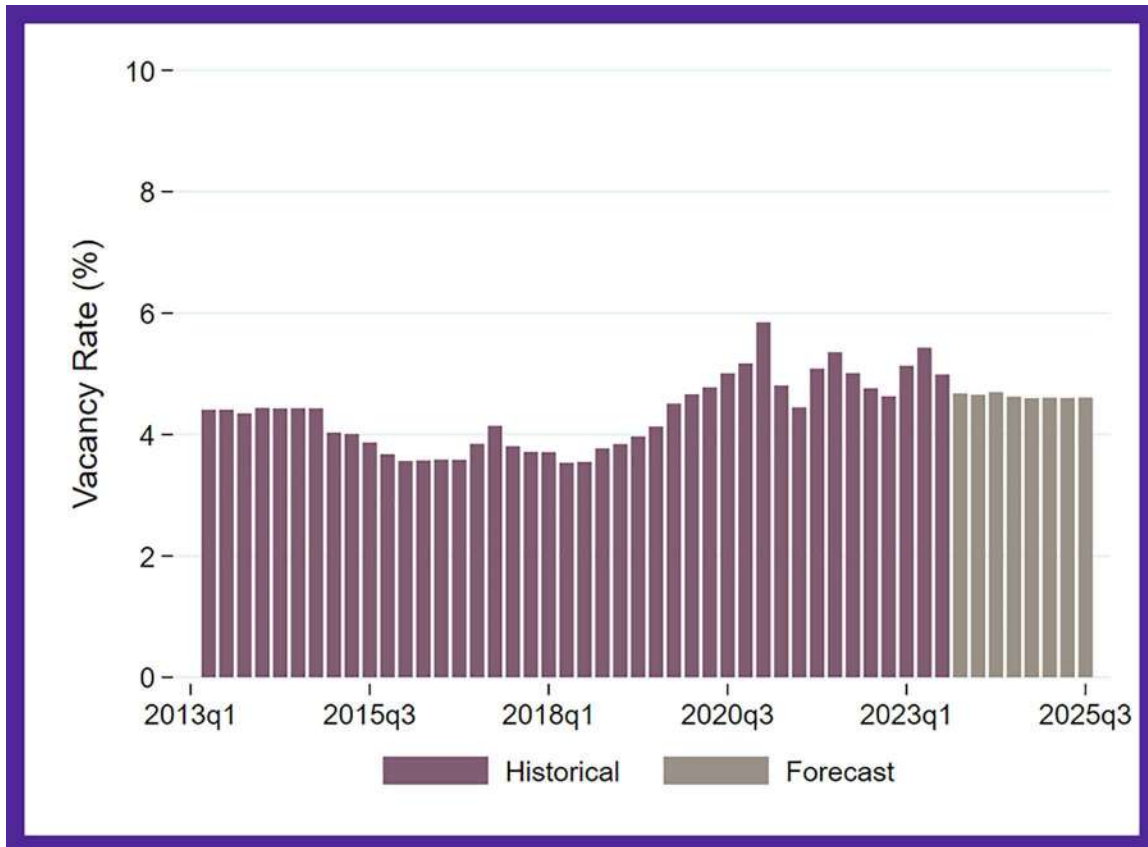
	ALL	RENTERS
RACE		
white only(%)	4.47	3.45
black only(%)	27.19	27.05
asian only(%)	3.13	3.34
hispanic(%)	62.08	63.30
other race(%)	3.12	2.86
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	22.66	23.51
highschool diploma, 18 yrs or more(%)	19.60	19.92
some college education, 18 yrs or more(%)	20.50	19.71
bachelors degree, 18 yrs or more(%)	9.85	8.31
more than bachelors degree, 18 yrs or more(%)	4.05	2.56
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		28.87
renter households living in 2-4 unit housing(%)		26.79
renter households living in 5-9 unit housing(%)		15.51
renter households living in 10-19 unit housing(%)		13.65
renter households living in 20+ unit housing(%)		15.01
renter households living in other types of housing(%)		0.18
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		65.72
renter households living in a structure built between 1970 and 1999(%)		23.25
renter households living in a structure built between 2000 and 2009(%)		5.36
renter households living in a structure built between 2010 and 2019(%)		5.32
renter households living in a structure built in 2020 and 2021(%)		0.35
HOUSEHOLD STATISTICS		
share of renter households(%)	66.03	
share of renter households living in multifamily structure(%)		44.16
share of rent-burdened households(%)		60.58
share of households with children(%)	47.30	45.79
average household size	3.16	2.90
median household income	\$53,556	\$39,961
MIGRATION STATISTICS		
population living in the same house for over a year(%)	91.34	90.69
population who moved within CA last year(%)	6.40	6.74
population who moved from other states to CA last year(%)	0.79	0.73
population who moved from abroad last year(%)	0.47	0.57

Source: 2021 1-Year American Community Survey

Inglewood Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

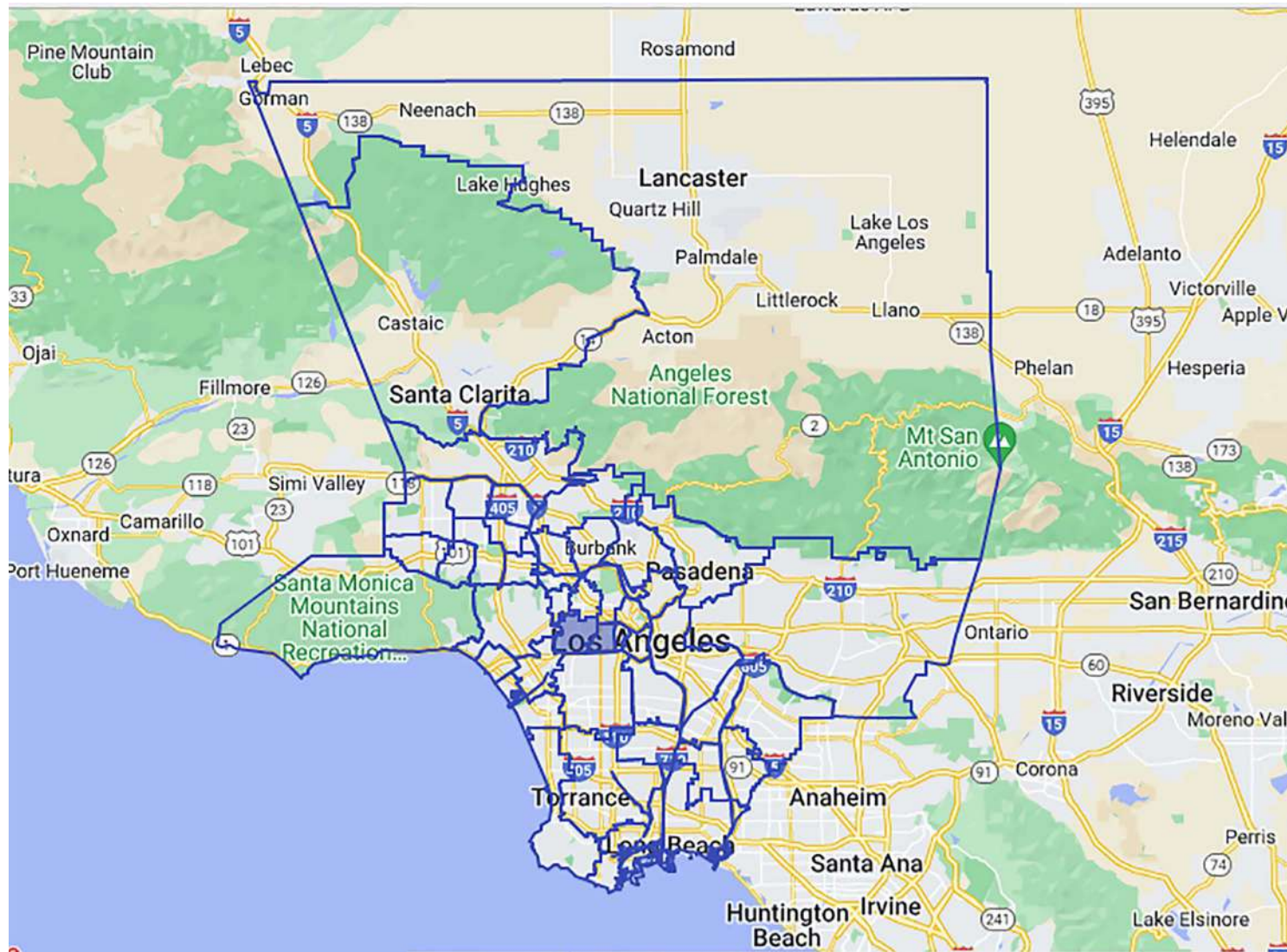


Inglewood · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Koreatown-Mid-City

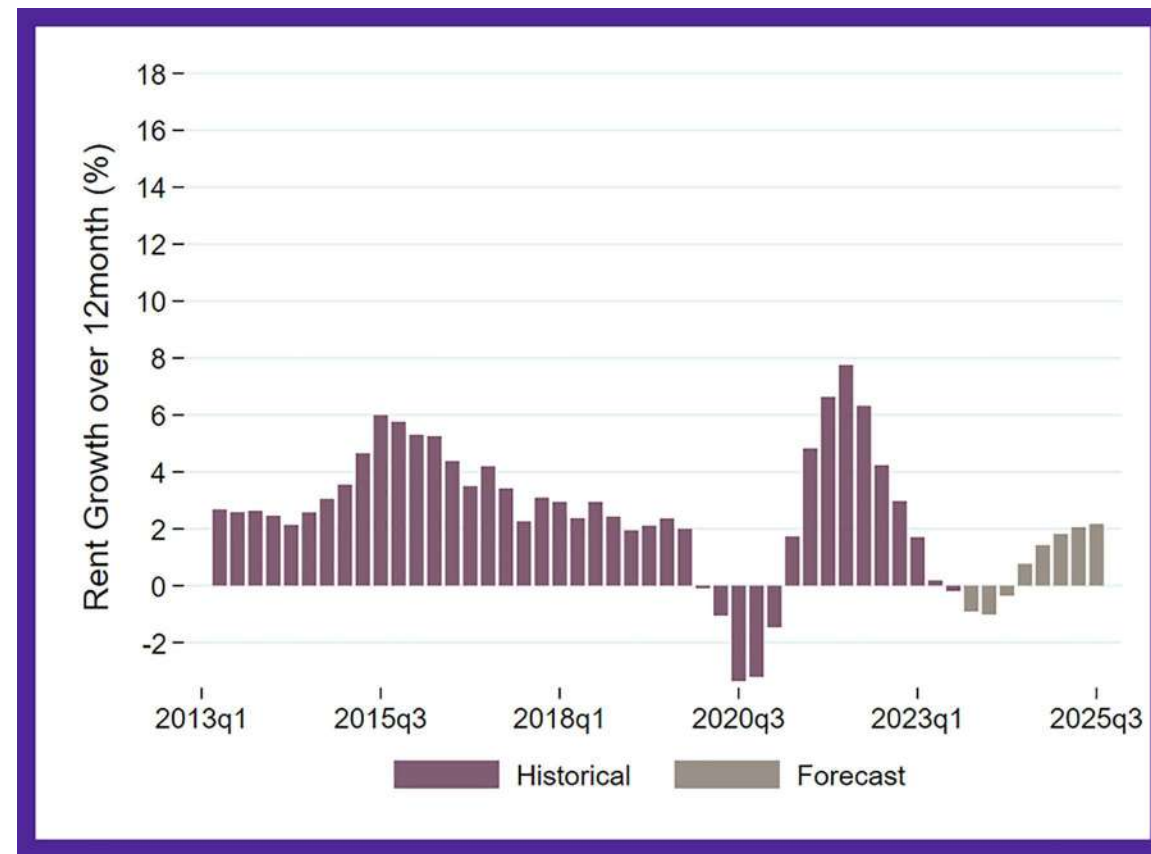
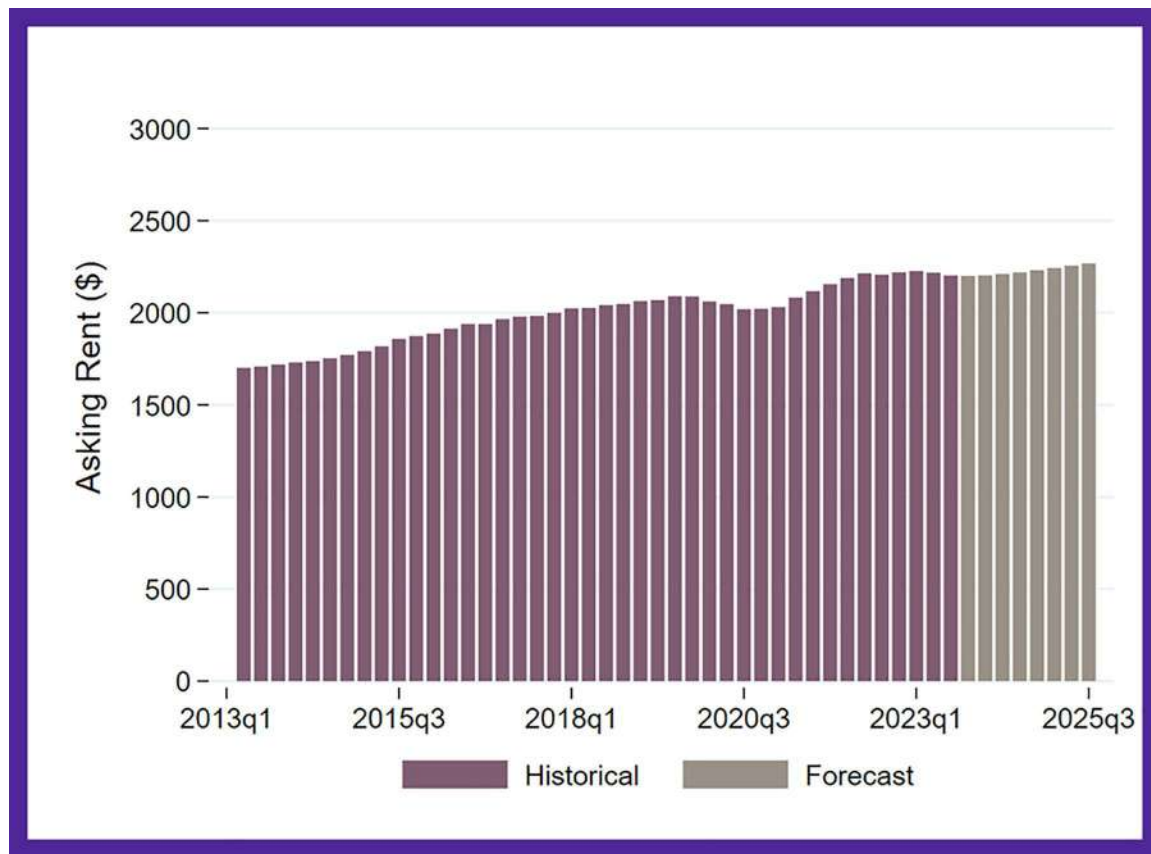


KOREATOWN - MID CITY

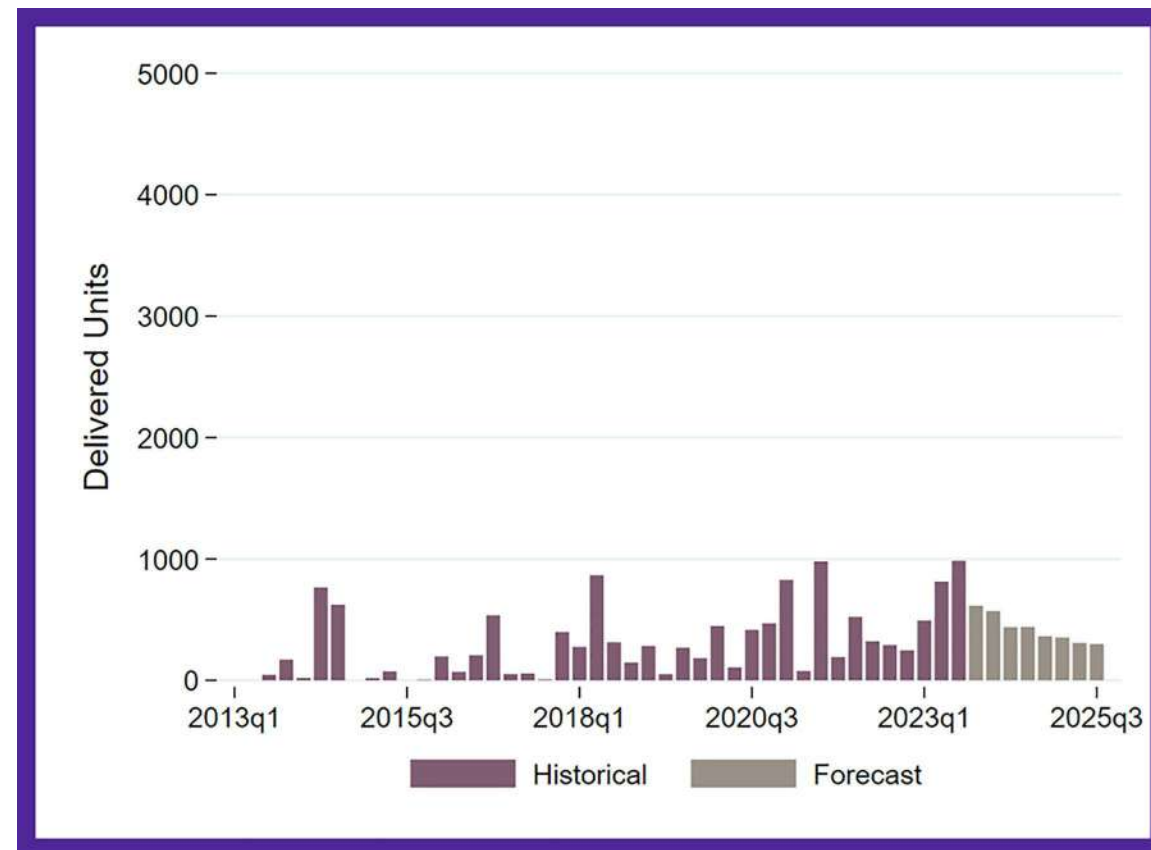
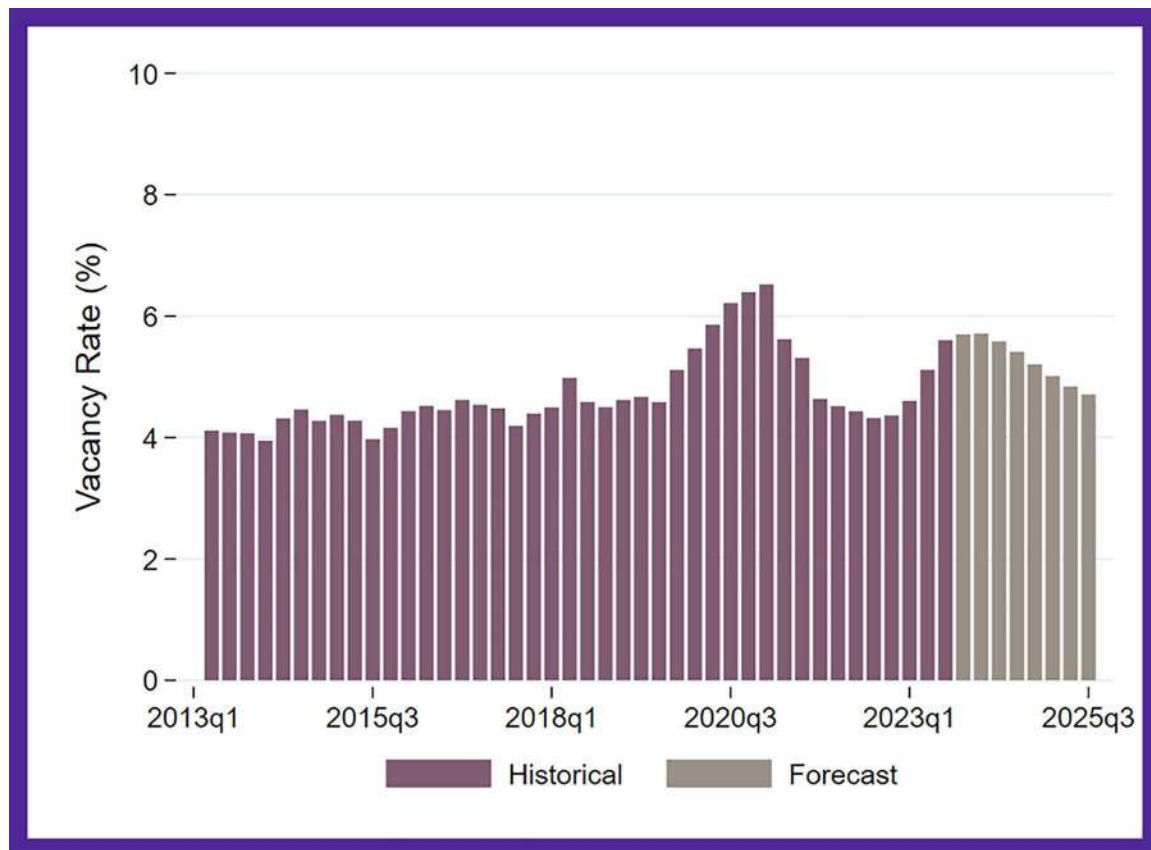
	ALL	RENTERS
RACE		
white only(%)	26.11	21.55
black only(%)	6.89	6.86
asian only(%)	26.92	25.35
hispanic(%)	35.80	41.86
other race(%)	4.27	4.39
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	12.88	14.82
highschool diploma, 18 yrs or more(%)	15.07	15.83
some college education, 18 yrs or more(%)	17.47	17.77
bachelors degree, 18 yrs or more(%)	26.06	25.91
more than bachelors degree, 18 yrs or more(%)	11.66	8.66
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		6.04
renter households living in 2-4 unit housing(%)		15.73
renter households living in 5-9 unit housing(%)		15.05
renter households living in 10-19 unit housing(%)		14.23
renter households living in 20+ unit housing(%)		48.84
renter households living in other types of housing(%)		0.11
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		58.05
renter households living in a structure built between 1970 and 1999(%)		29.44
renter households living in a structure built between 2000 and 2009(%)		5.14
renter households living in a structure built between 2010 and 2019(%)		6.98
renter households living in a structure built in 2020 and 2021(%)		0.39
HOUSEHOLD STATISTICS		
share of renter households(%)	82.55	
share of renter households living in multifamily structure(%)		78.12
share of rent-burdened households(%)		57.33
share of households with children(%)	28.66	26.00
average household size	2.27	2.18
median household income	\$61,796	\$54,895
MIGRATION STATISTICS		
population living in the same house for over a year(%)	85.64	83.75
population who moved within CA last year(%)	10.75	12.61
population who moved from other states to CA last year(%)	1.80	1.92
population who moved from abroad last year(%)	0.70	0.66

Source: 2021 1-Year American Community Survey

Koreatown-Mid-City Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

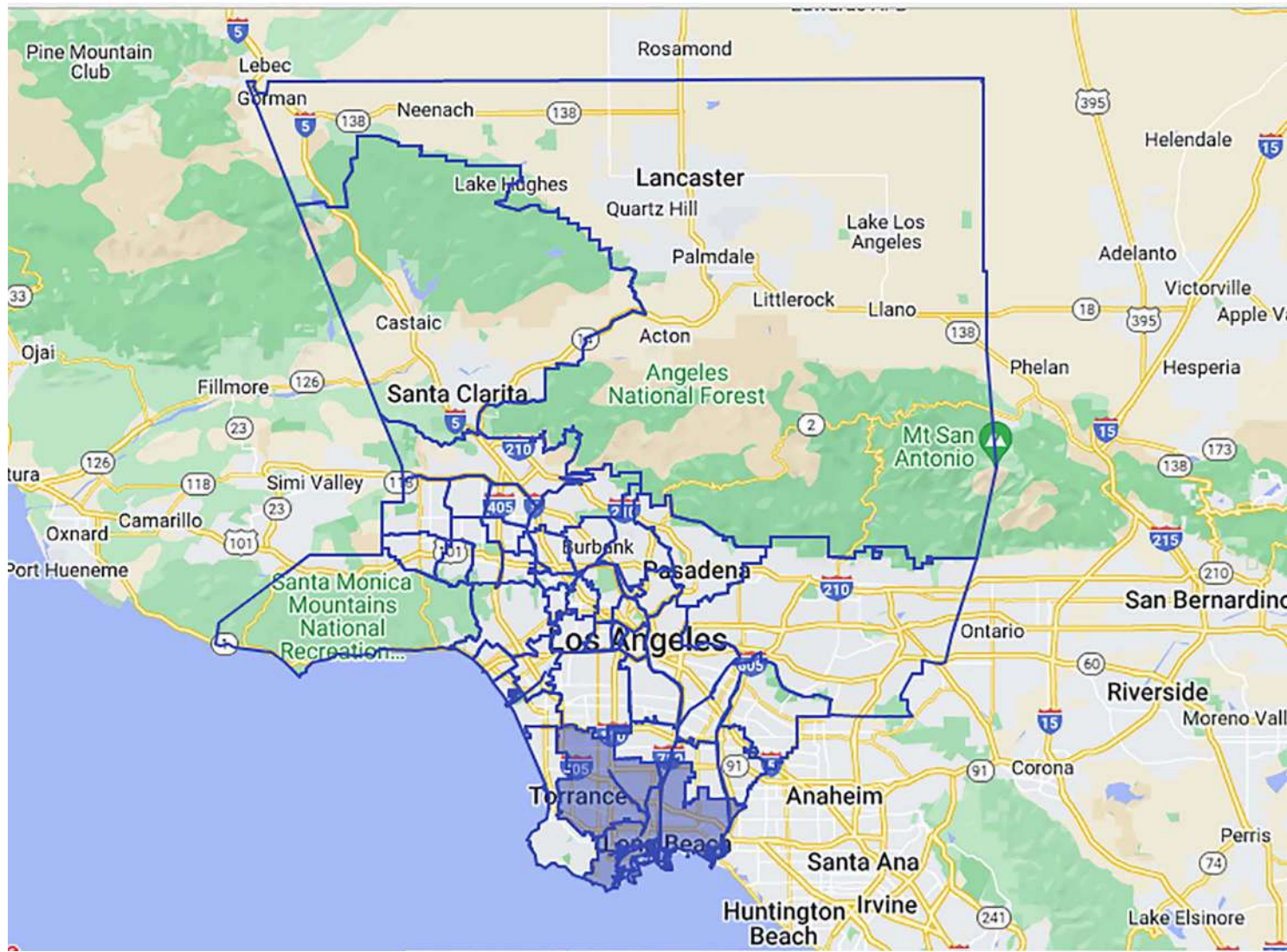


Koreatown-Mid-City · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Long Beach-South Bay

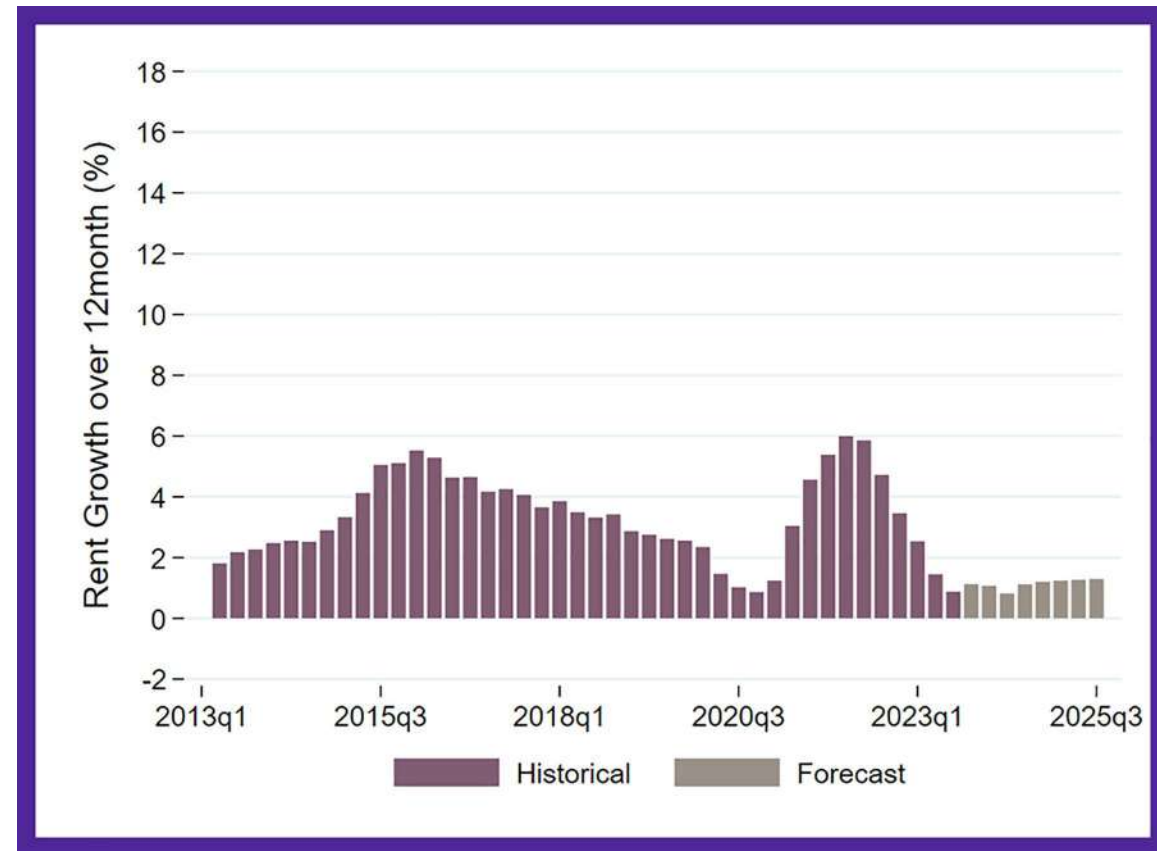
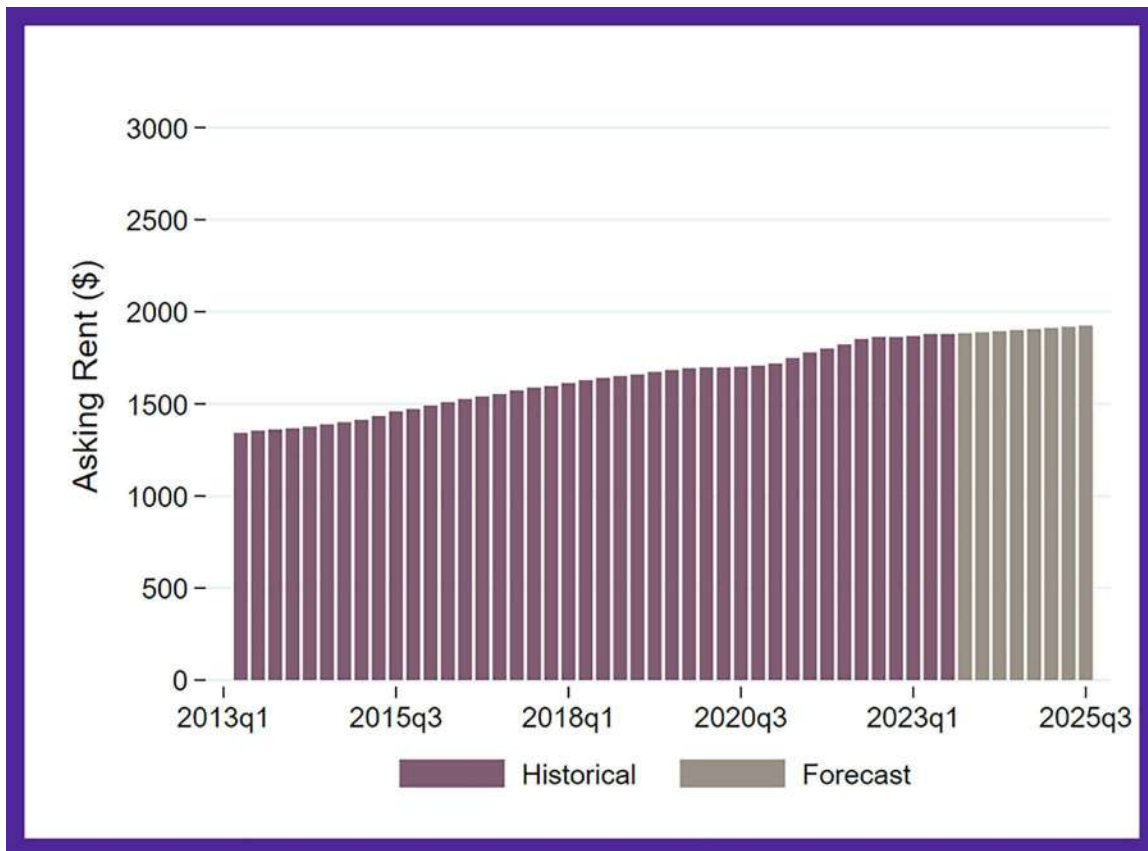


LONG BEACH-SOUTH BAY

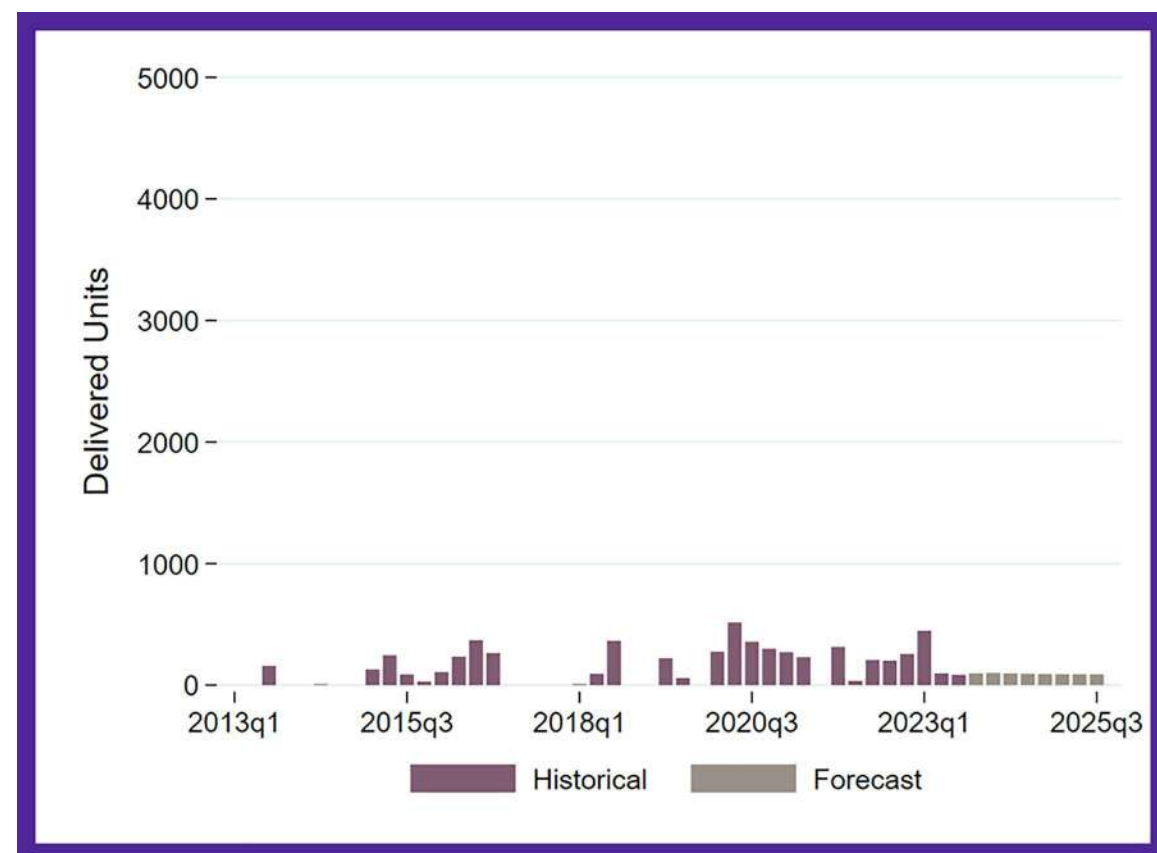
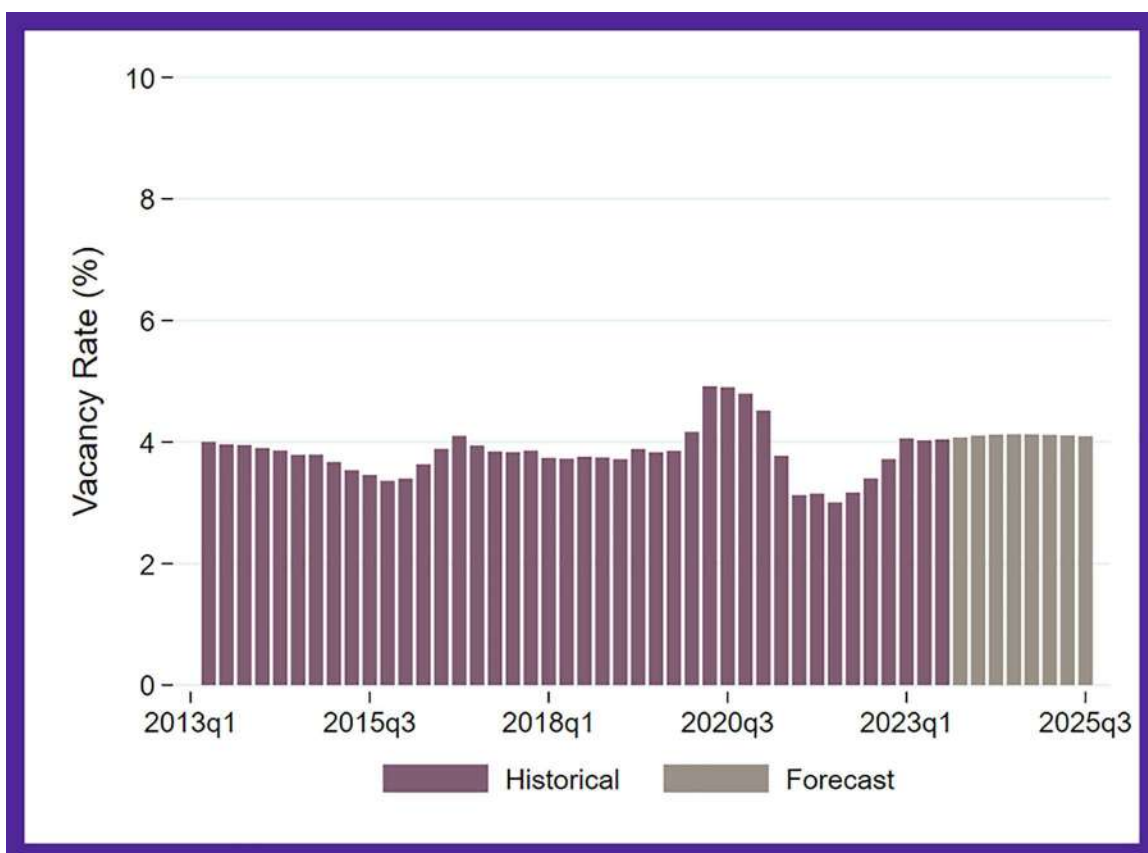
	ALL	RENTERS
RACE		
white only(%)	20.07	14.08
black only(%)	11.80	14.91
asian only(%)	17.07	12.83
hispanic(%)	45.76	53.33
other race(%)	5.29	4.85
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	13.39	15.14
highschool diploma, 18 yrs or more(%)	17.67	18.97
some college education, 18 yrs or more(%)	23.59	22.27
bachelors degree, 18 yrs or more(%)	16.81	14.00
more than bachelors degree, 18 yrs or more(%)	7.24	4.81
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		24.67
renter households living in 2-4 unit housing(%)		20.52
renter households living in 5-9 unit housing(%)		15.23
renter households living in 10-19 unit housing(%)		13.23
renter households living in 20+ unit housing(%)		24.91
renter households living in other types of housing(%)		1.44
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		54.88
renter households living in a structure built between 1970 and 1999(%)		37.09
renter households living in a structure built between 2000 and 2009(%)		4.45
renter households living in a structure built between 2010 and 2019(%)		3.41
renter households living in a structure built in 2020 and 2021(%)		0.16
HOUSEHOLD STATISTICS		
share of renter households(%)	55.33	
share of renter households living in multifamily structure(%)		53.36
share of rent-burdened households(%)		53.92
share of households with children(%)	43.36	42.68
average household size	2.83	2.70
median household income	\$76,215	\$56,646
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.04	87.06
population who moved within CA last year(%)	7.41	9.65
population who moved from other states to CA last year(%)	1.09	1.41
population who moved from abroad last year(%)	0.43	0.61

Source: 2021 1-Year American Community Survey

Long Beach-South Bay Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

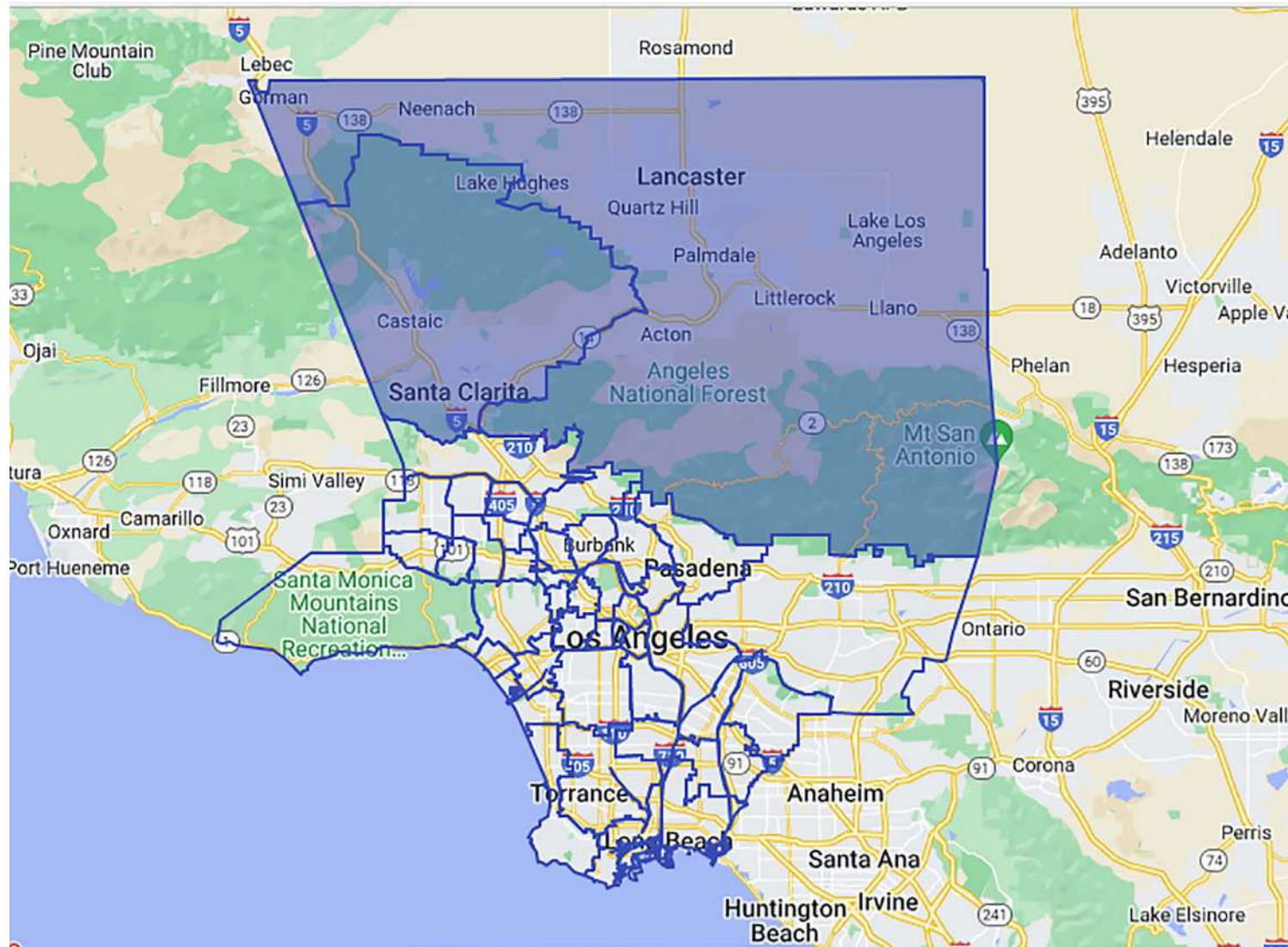


Long Beach-South Bay · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Palmdale-Lancaster

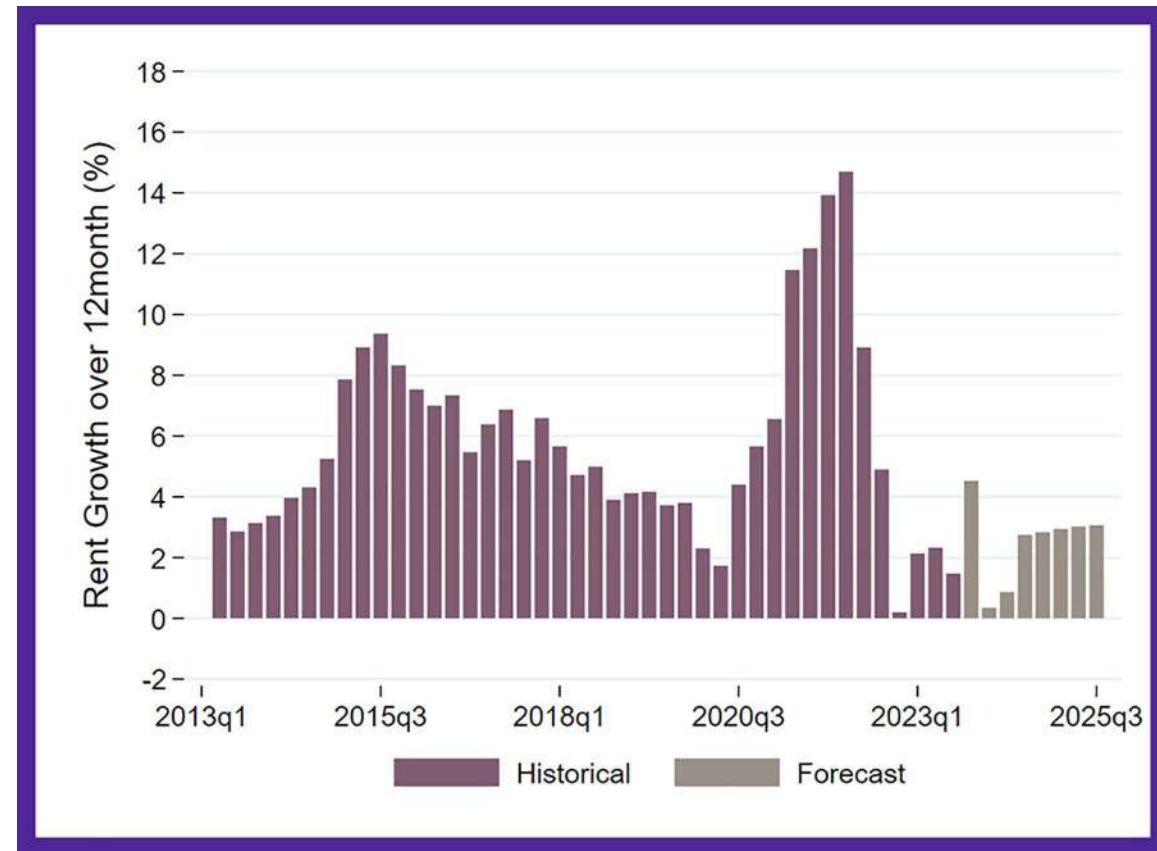
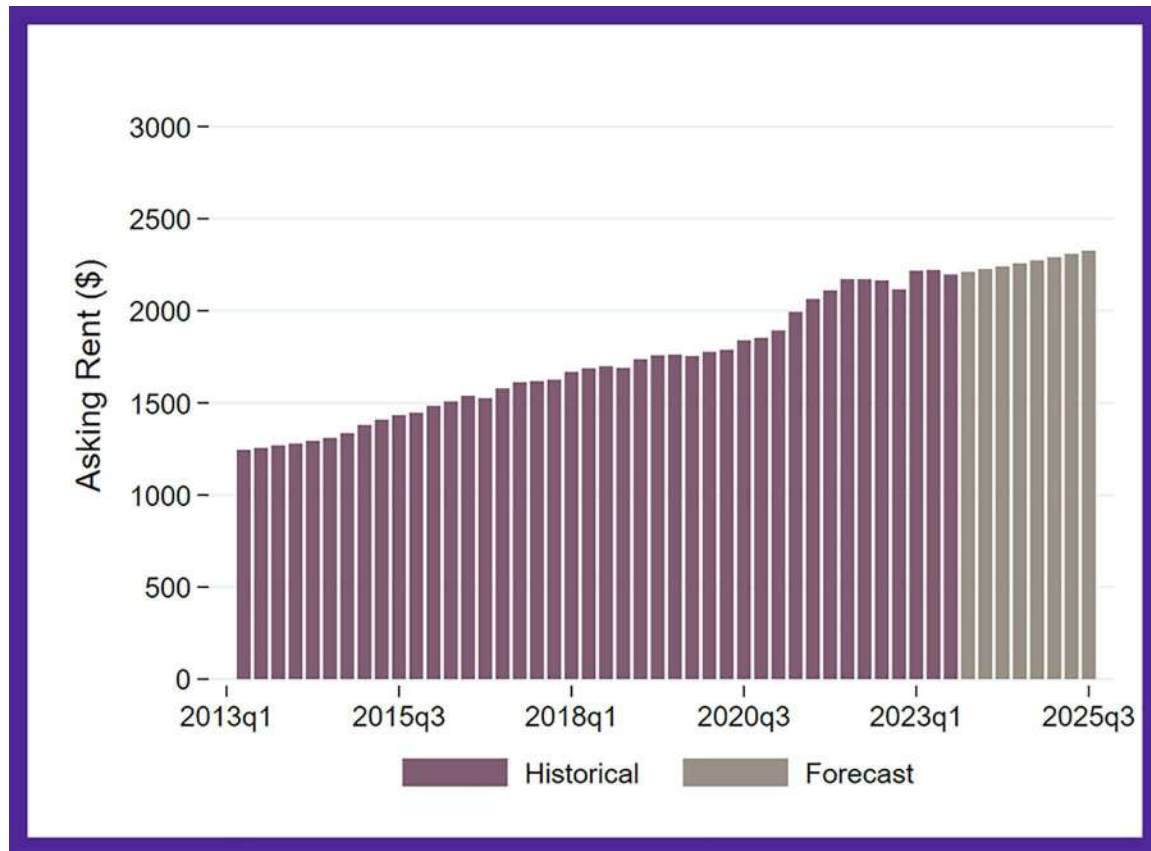


PALMDALE-LANCASTER

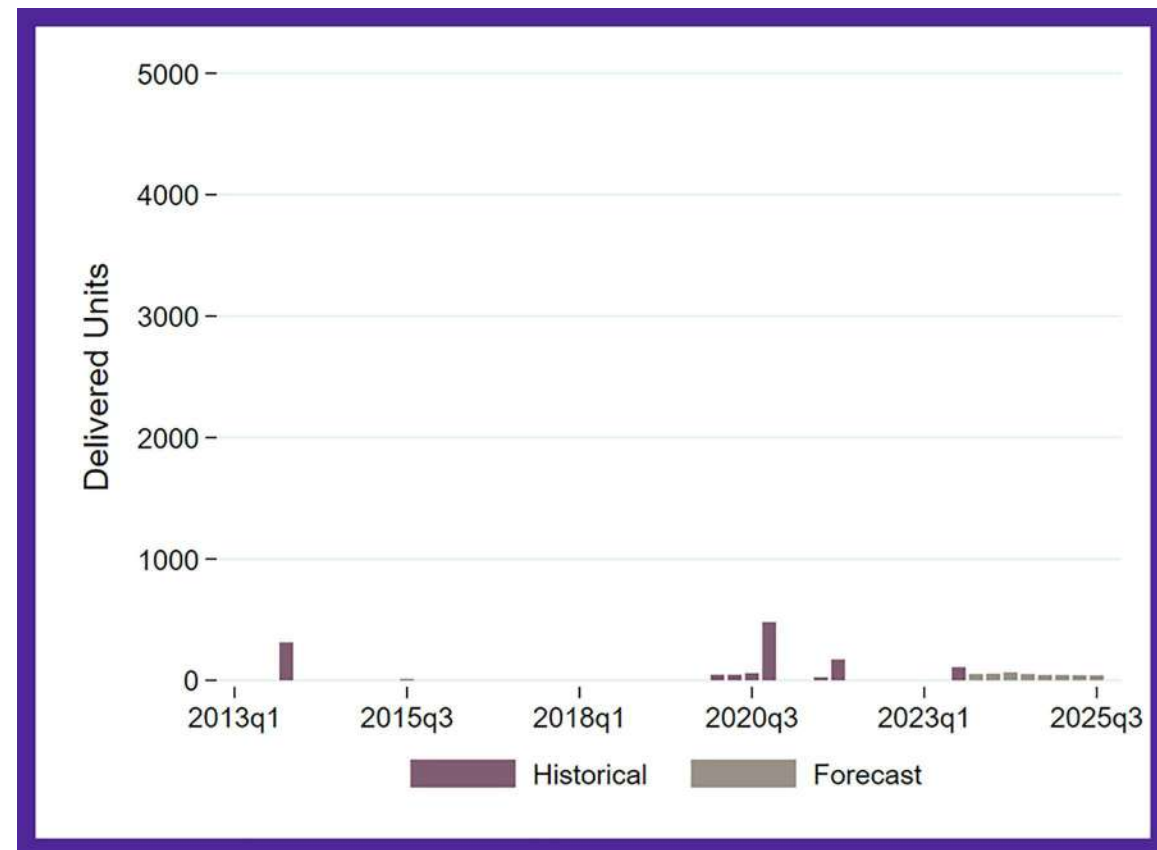
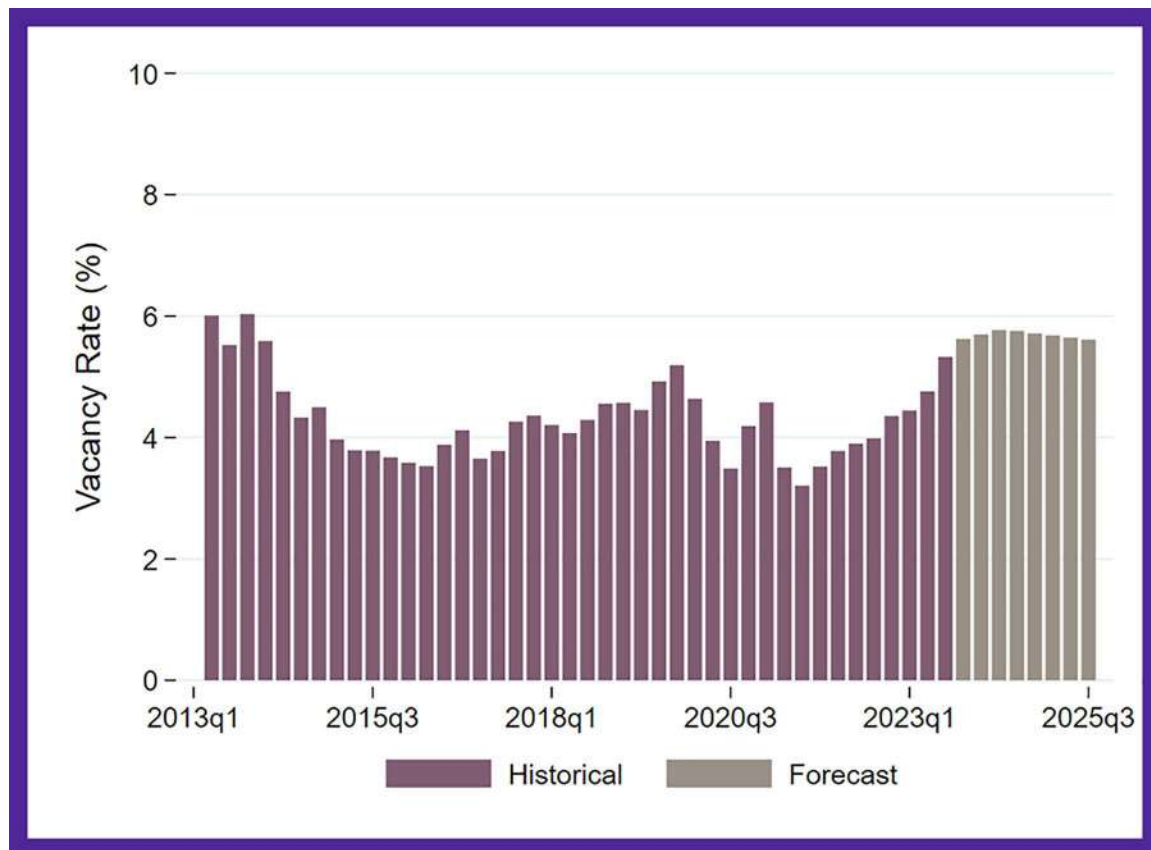
	ALL	RENTERS
RACE		
white only(%)	33.70	26.62
black only(%)	9.20	18.59
asian only(%)	8.62	3.61
hispanic(%)	42.90	45.89
other race(%)	5.58	5.30
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	9.95	11.62
highschool diploma, 18 yrs or more(%)	17.92	21.37
some college education, 18 yrs or more(%)	24.66	23.53
bachelors degree, 18 yrs or more(%)	13.98	8.57
more than bachelors degree, 18 yrs or more(%)	8.00	4.56
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		45.41
renter households living in 2-4 unit housing(%)		9.87
renter households living in 5-9 unit housing(%)		12.17
renter households living in 10-19 unit housing(%)		8.54
renter households living in 20+ unit housing(%)		20.34
renter households living in other types of housing(%)		3.66
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		23.83
renter households living in a structure built between 1970 and 1999(%)		57.48
renter households living in a structure built between 2000 and 2009(%)		13.86
renter households living in a structure built between 2010 and 2019(%)		4.72
renter households living in a structure built in 2020 and 2021(%)		0.11
HOUSEHOLD STATISTICS		
share of renter households(%)	29.66	
share of renter households living in multifamily structure(%)		41.05
share of rent-burdened households(%)		59.14
share of households with children(%)	52.86	50.00
average household size	3.19	2.99
median household income	\$91,664	\$55,204
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.21	86.41
population who moved within CA last year(%)	7.74	10.37
population who moved from other states to CA last year(%)	0.51	0.65
population who moved from abroad last year(%)	0.19	0.26

Source: 2021 1-Year American Community Survey

Palmdale-Lancaster Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

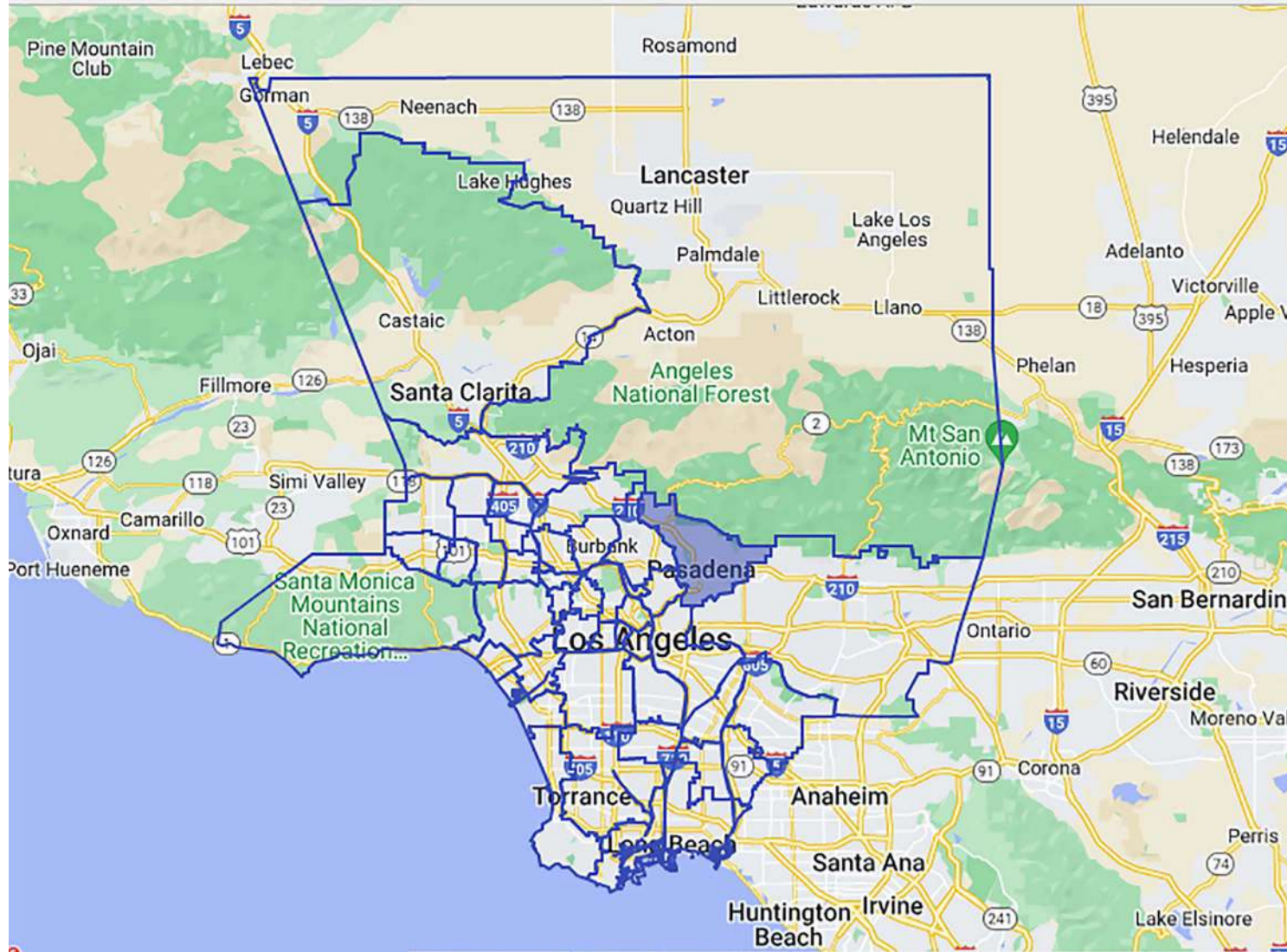


Palmdale-Lancaster · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Pasadena

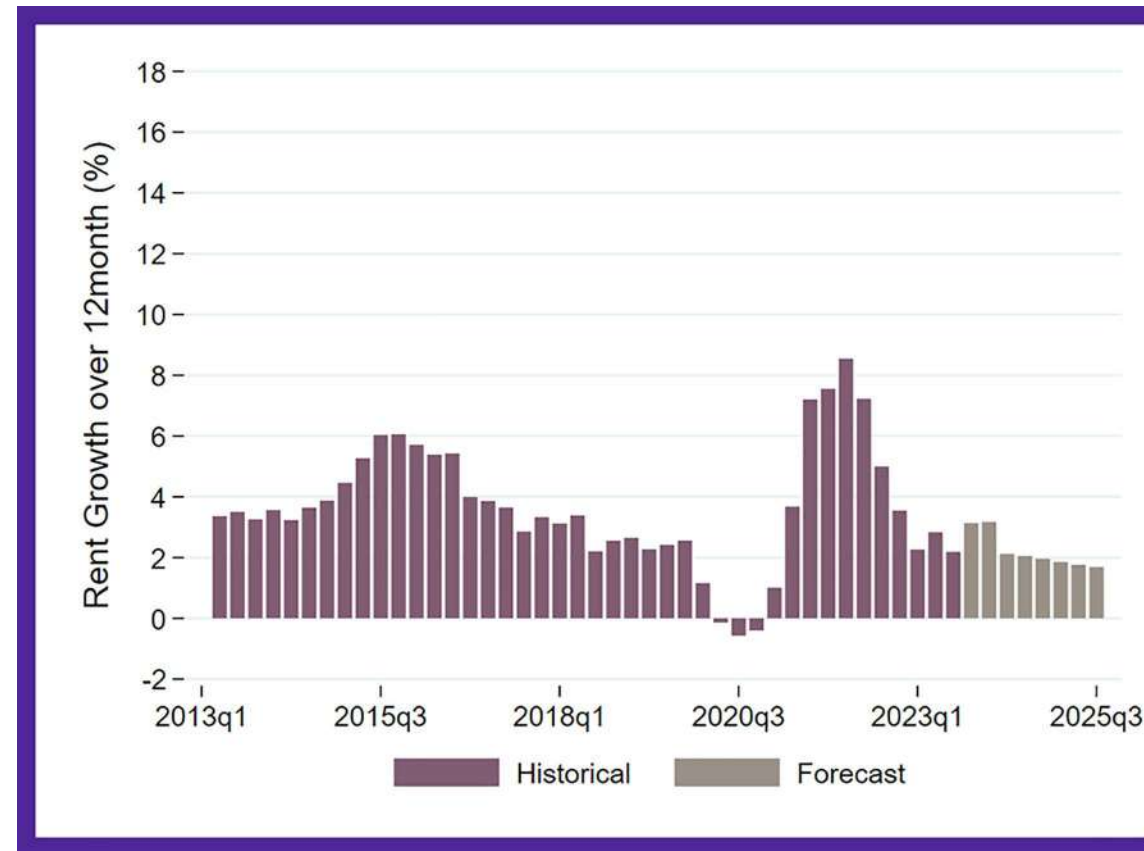
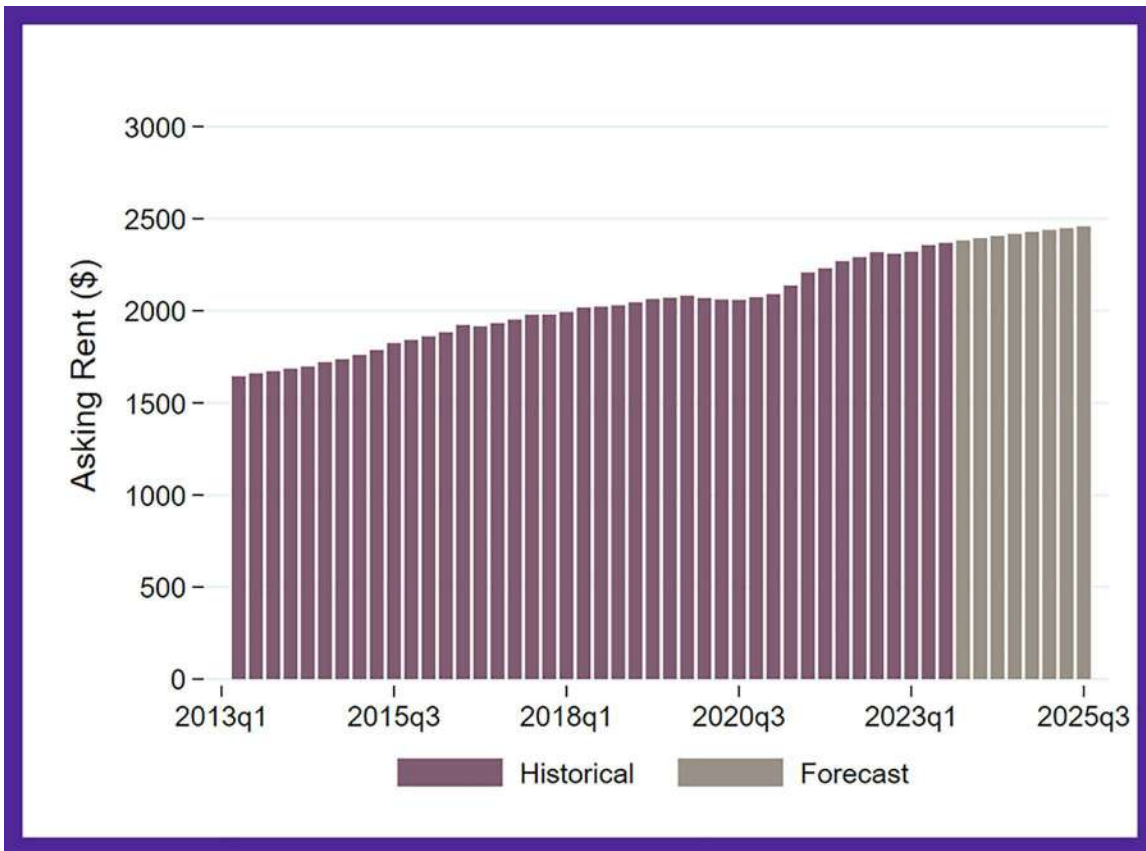


PASADENA

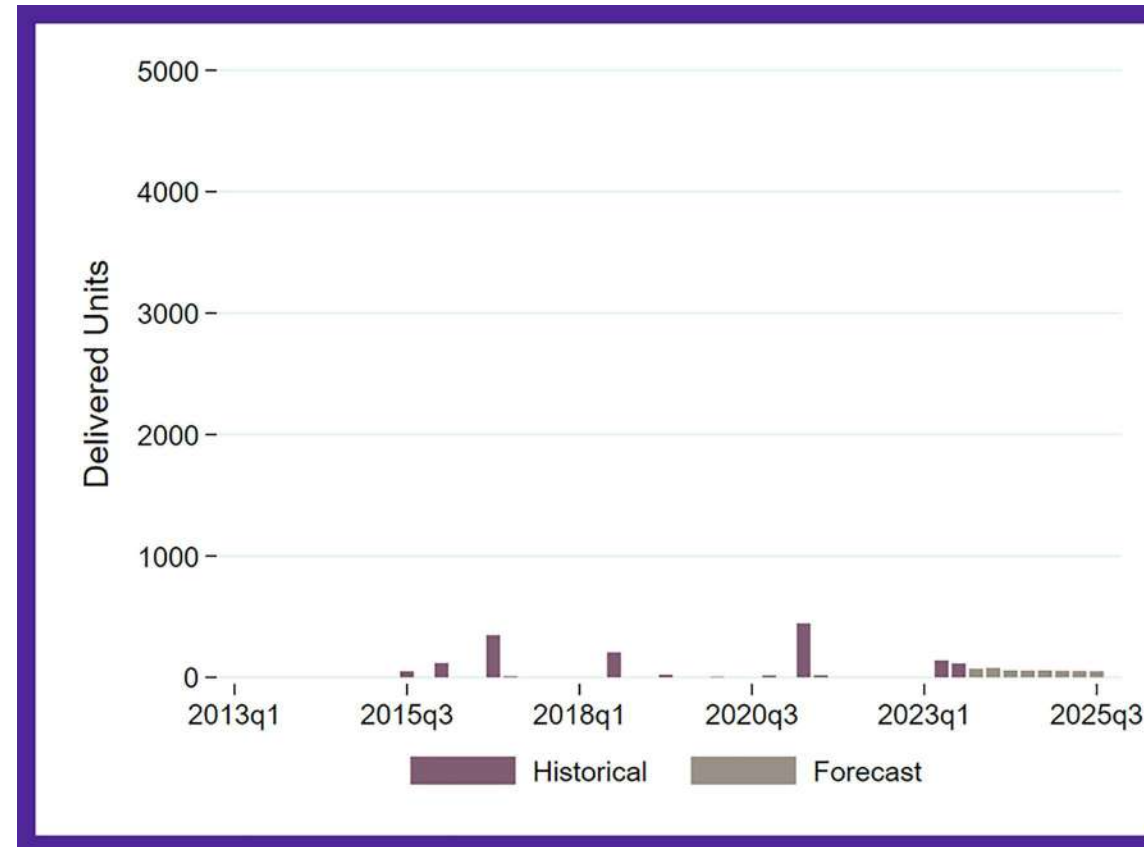
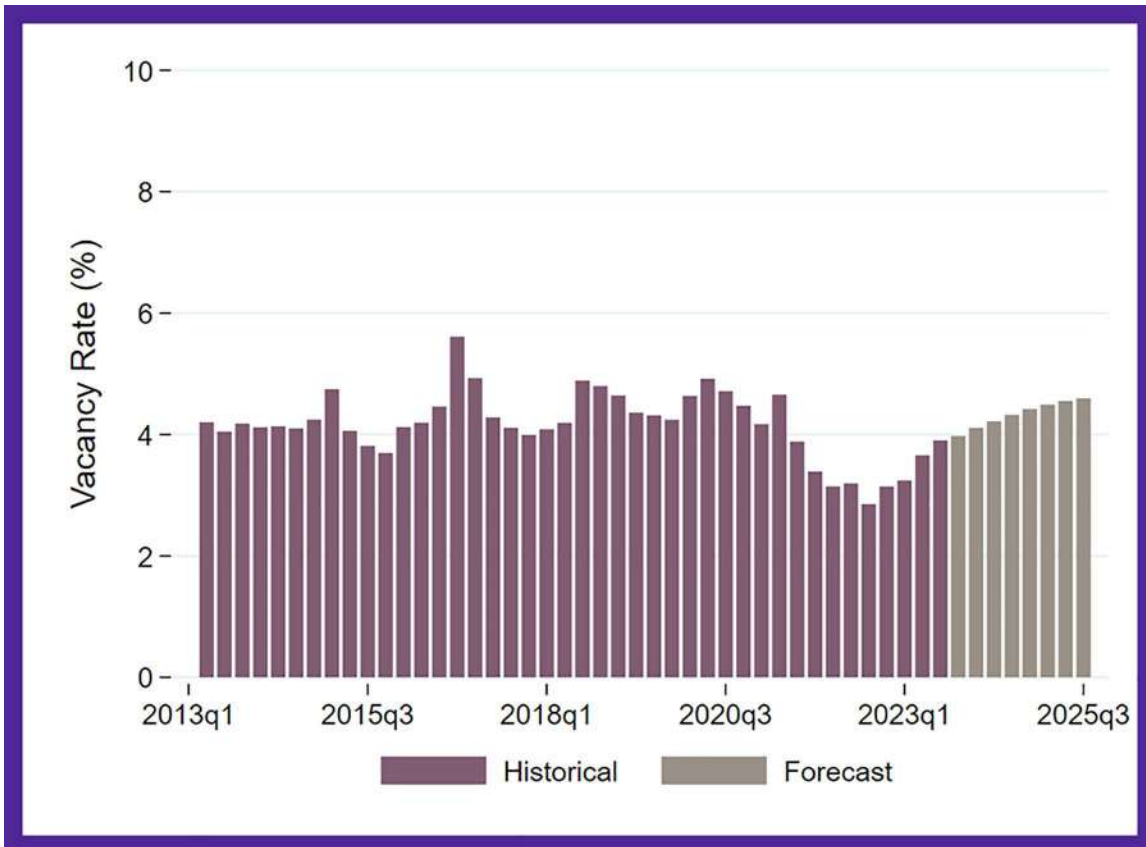
	ALL	RENTERS
RACE		
white only(%)	32.83	24.87
black only(%)	8.50	11.02
asian only(%)	17.35	15.84
hispanic(%)	35.23	42.80
other race(%)	6.09	5.47
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	8.89	10.41
highschool diploma, 18 yrs or more(%)	11.49	12.76
some college education, 18 yrs or more(%)	17.57	19.87
bachelors degree, 18 yrs or more(%)	23.24	21.31
more than bachelors degree, 18 yrs or more(%)	21.00	18.99
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		23.77
renter households living in 2-4 unit housing(%)		7.88
renter households living in 5-9 unit housing(%)		14.18
renter households living in 10-19 unit housing(%)		13.18
renter households living in 20+ unit housing(%)		41.00
renter households living in other types of housing(%)		0.00
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		48.78
renter households living in a structure built between 1970 and 1999(%)		33.16
renter households living in a structure built between 2000 and 2009(%)		12.96
renter households living in a structure built between 2010 and 2019(%)		4.10
renter households living in a structure built in 2020 and 2021(%)		1.00
HOUSEHOLD STATISTICS		
share of renter households(%)	57.23	
share of renter households living in multifamily structure(%)		68.36
share of rent-burdened households(%)		52.78
share of households with children(%)	28.81	24.39
average household size	2.36	2.18
median household income	\$85,484	\$66,430
MIGRATION STATISTICS		
population living in the same house for over a year(%)	87.58	83.92
population who moved within CA last year(%)	10.07	12.97
population who moved from other states to CA last year(%)	1.31	2.01
population who moved from abroad last year(%)	0.44	0.67

Source: 2021 1-Year American Community Survey

Pasadena Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

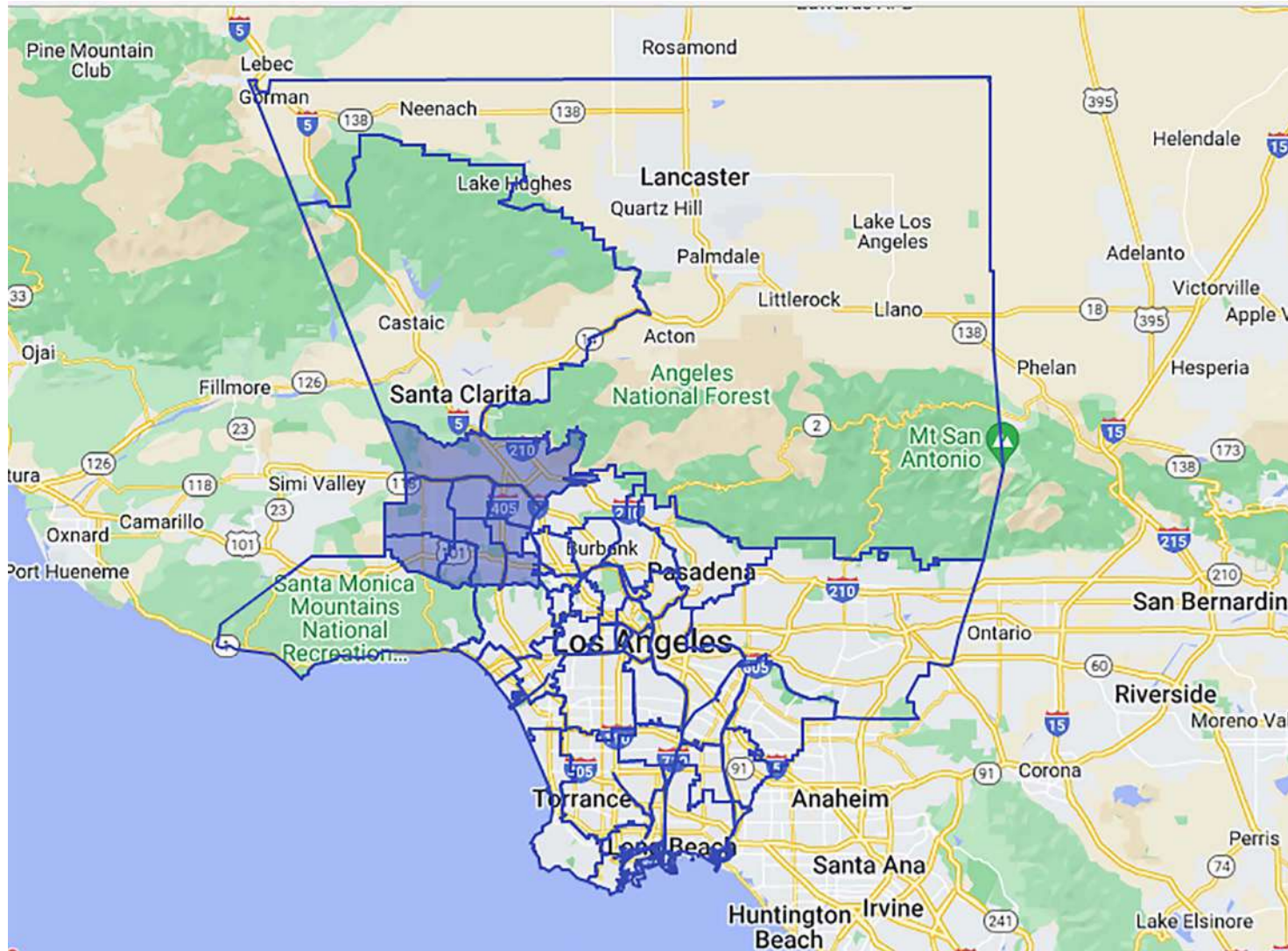


Pasadena · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

San Fernando Valley

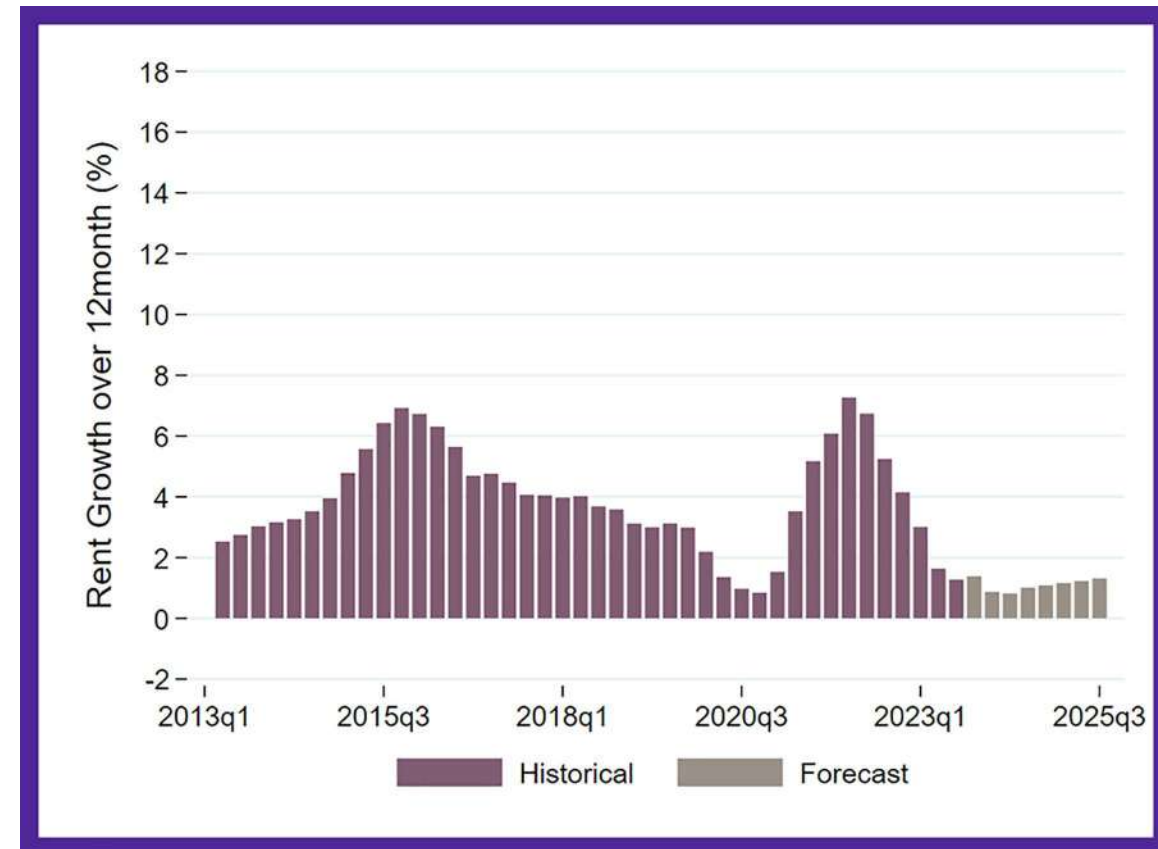
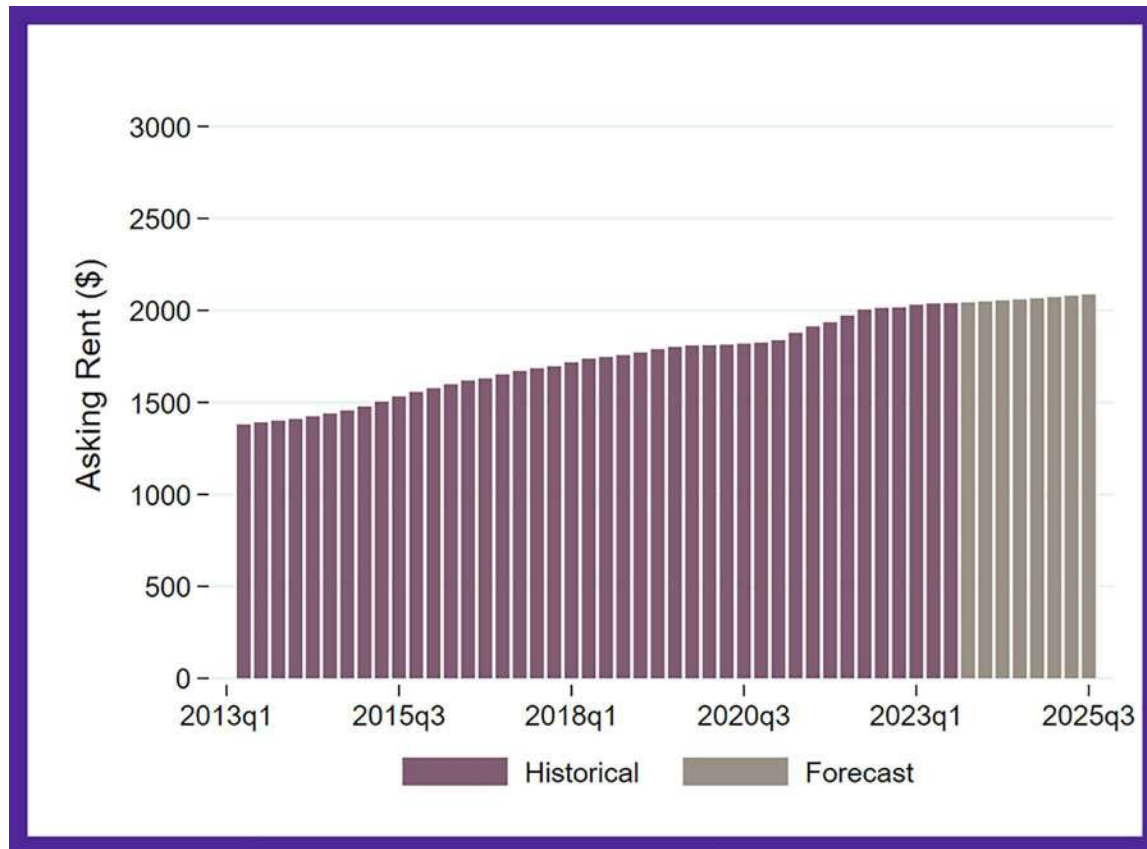


SAN FERNANDO VALLEY

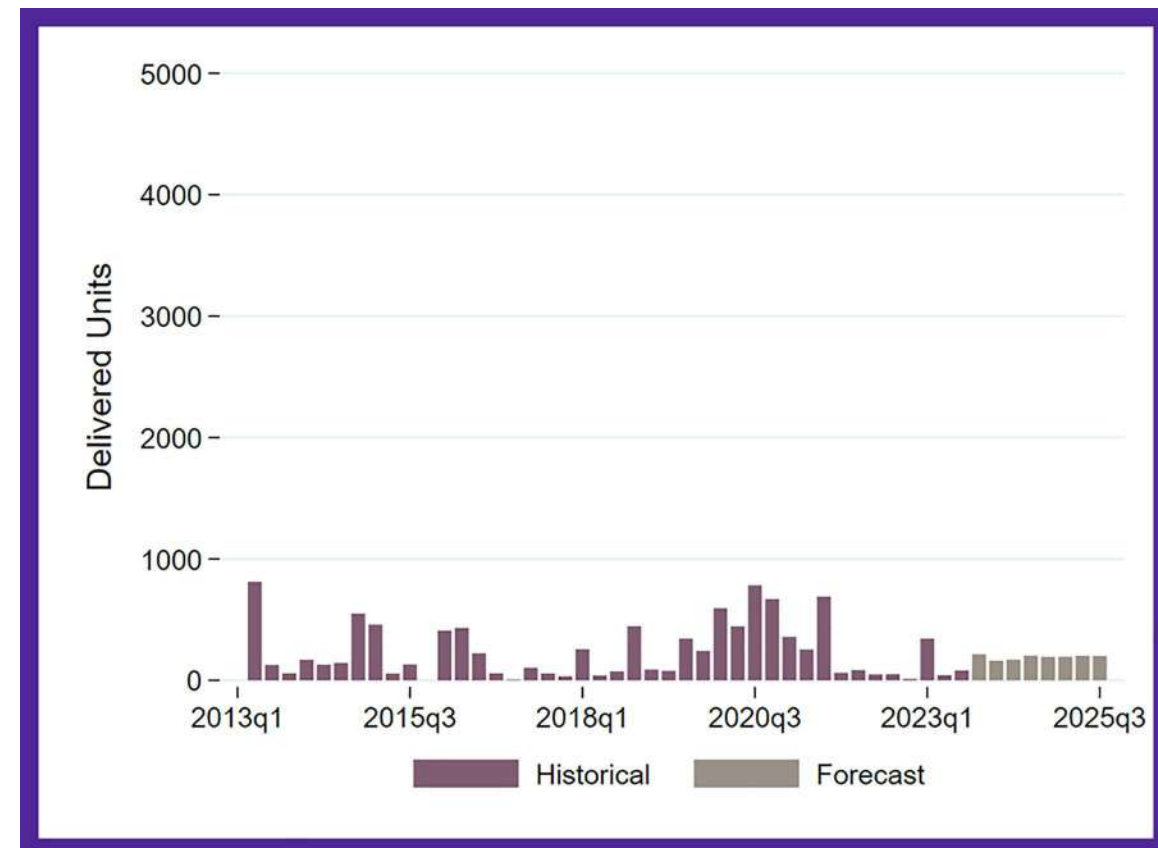
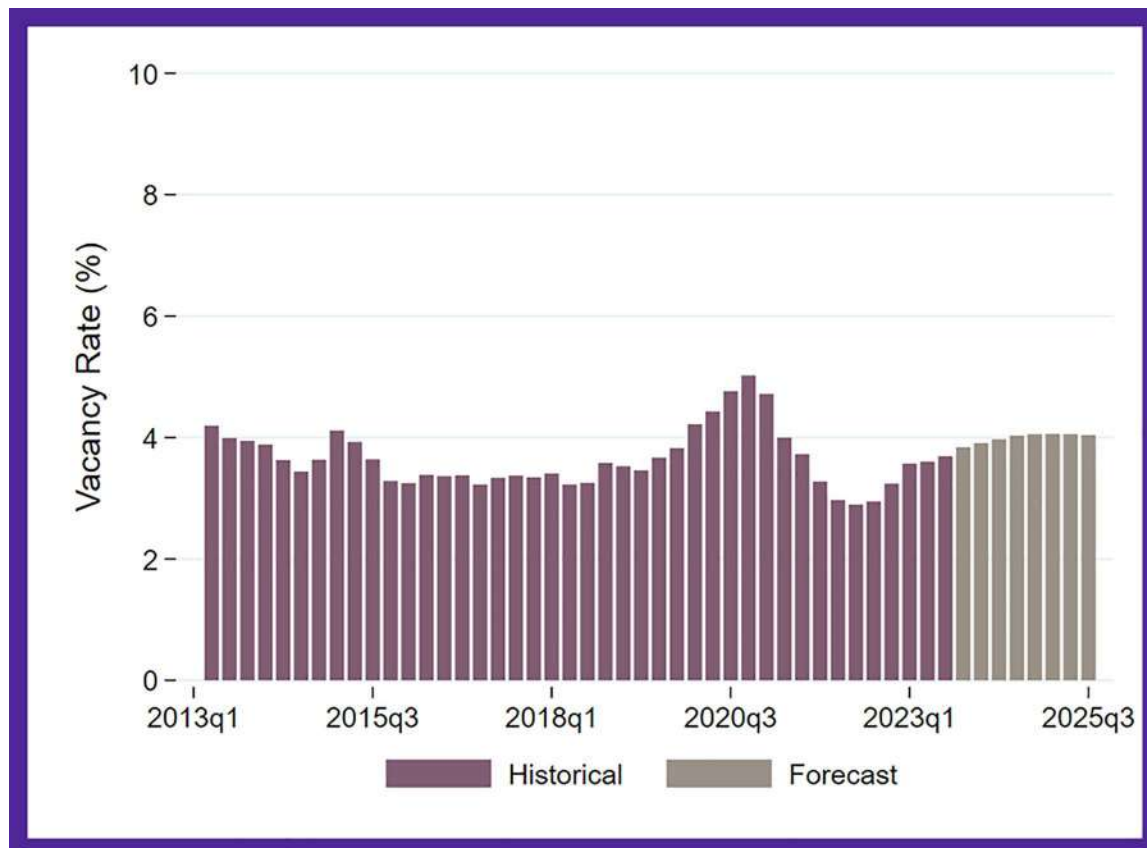
	ALL	RENTERS
RACE		
white only(%)	30.39	22.82
black only(%)	3.64	5.05
asian only(%)	12.25	9.37
hispanic(%)	49.36	58.60
other race(%)	4.36	4.17
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	14.15	16.08
highschool diploma, 18 yrs or more(%)	17.79	19.73
some college education, 18 yrs or more(%)	21.45	21.78
bachelors degree, 18 yrs or more(%)	17.08	13.64
more than bachelors degree, 18 yrs or more(%)	8.24	4.88
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		24.68
renter households living in 2-4 unit housing(%)		4.25
renter households living in 5-9 unit housing(%)		6.37
renter households living in 10-19 unit housing(%)		10.51
renter households living in 20+ unit housing(%)		53.40
renter households living in other types of housing(%)		0.79
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		38.31
renter households living in a structure built between 1970 and 1999(%)		46.78
renter households living in a structure built between 2000 and 2009(%)		6.39
renter households living in a structure built between 2010 and 2019(%)		7.79
renter households living in a structure built in 2020 and 2021(%)		0.73
HOUSEHOLD STATISTICS		
share of renter households(%)	47.61	
share of renter households living in multifamily structure(%)		70.28
share of rent-burdened households(%)		62.61
share of households with children(%)	46.76	42.57
average household size	3.01	2.76
median household income	\$79,304	\$51,496
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.25	86.41
population who moved within CA last year(%)	7.76	10.93
population who moved from other states to CA last year(%)	0.67	0.93
population who moved from abroad last year(%)	0.37	0.68

Source: 2021 1-Year American Community Survey

San Fernando Valley Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

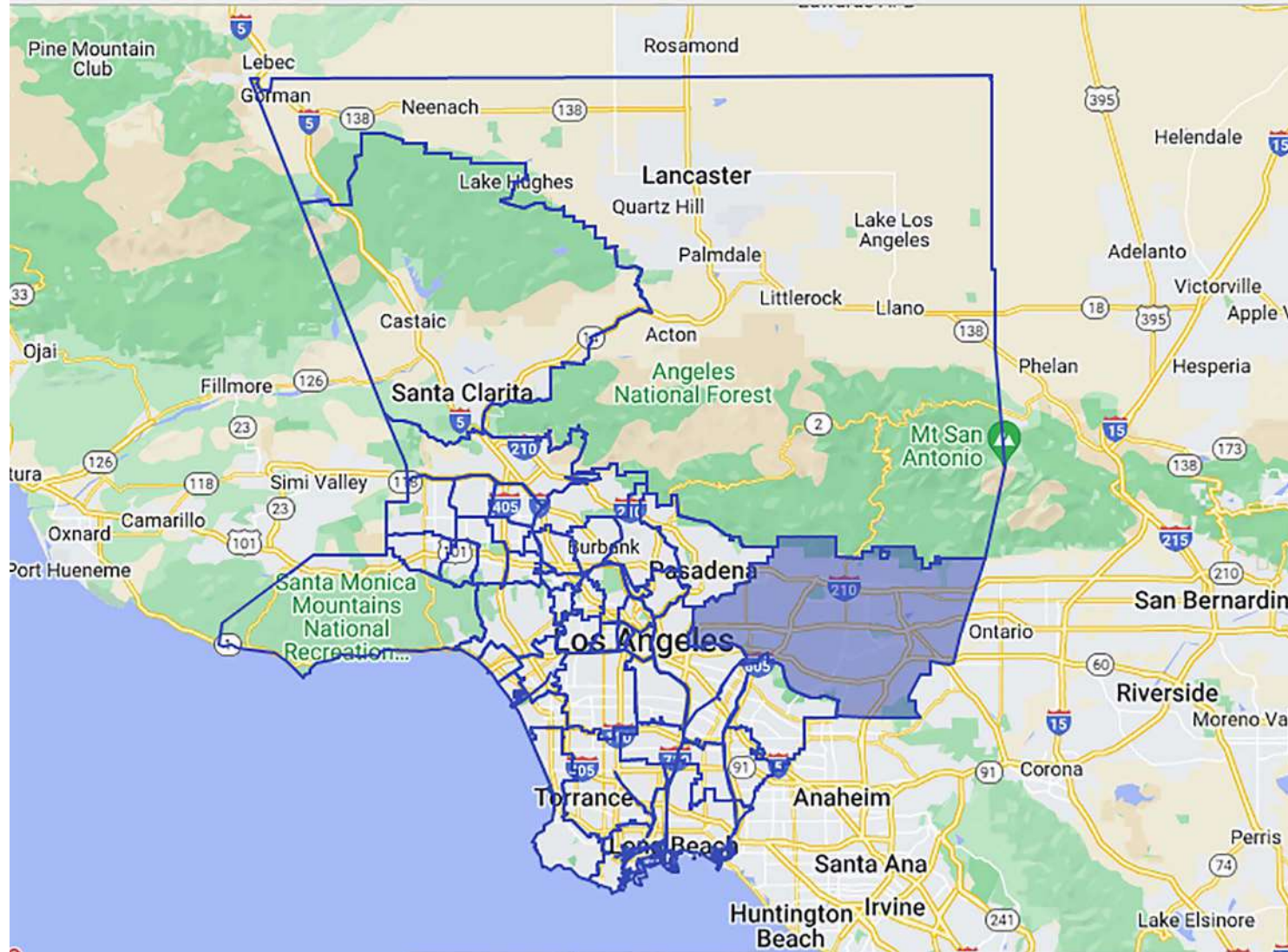


San Fernando Valley · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

San Gabriel Valley

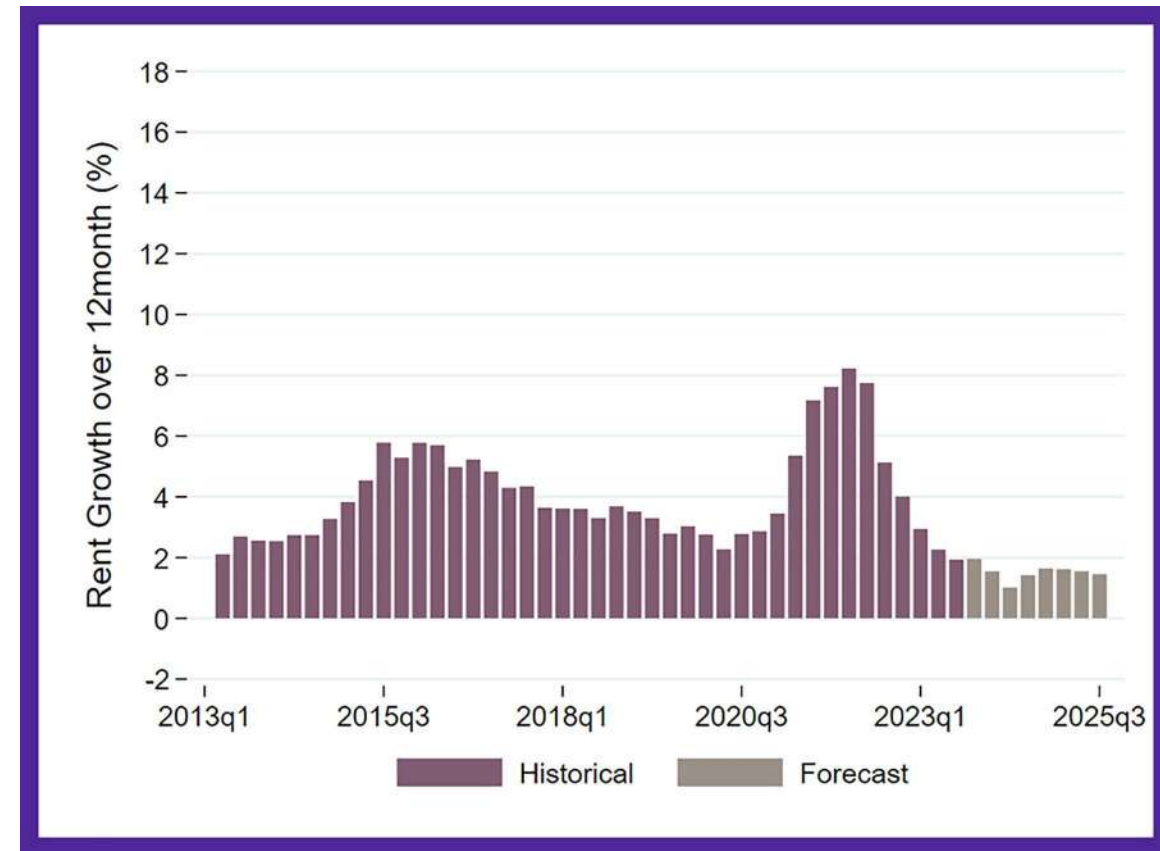
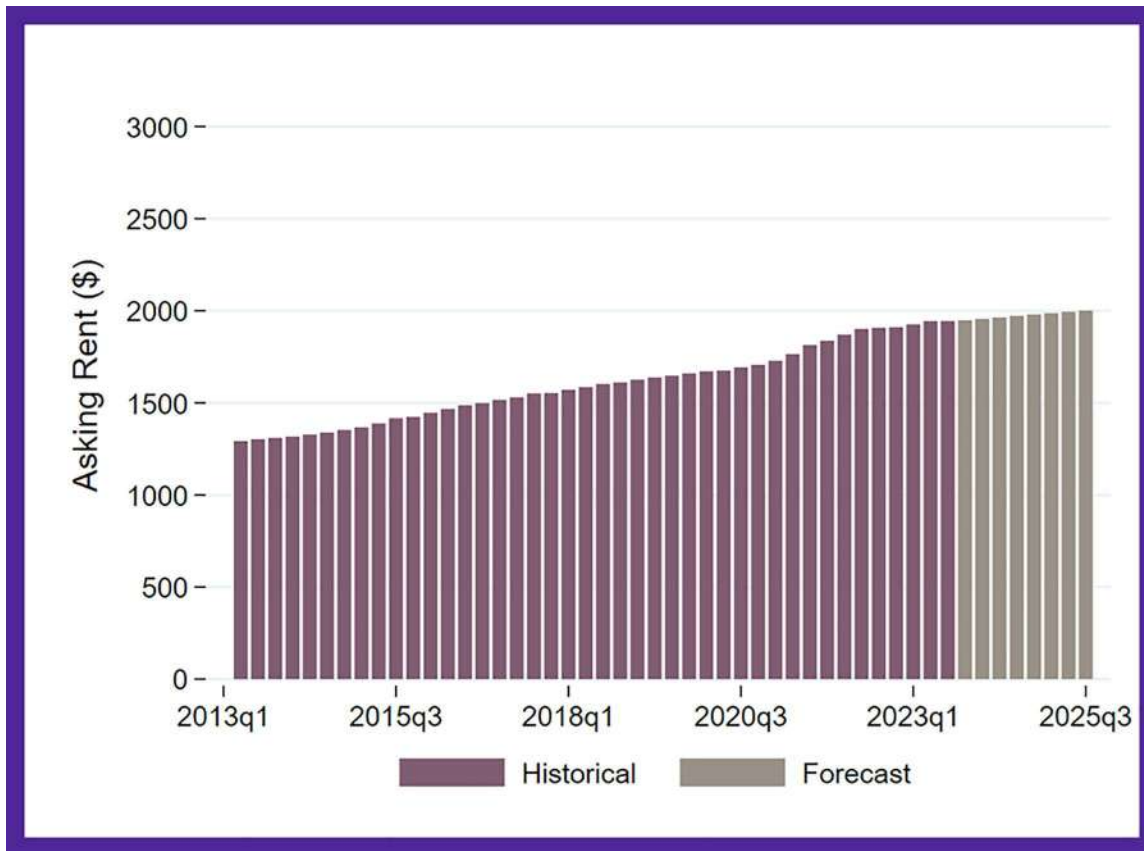


SAN GABRIEL VALLEY

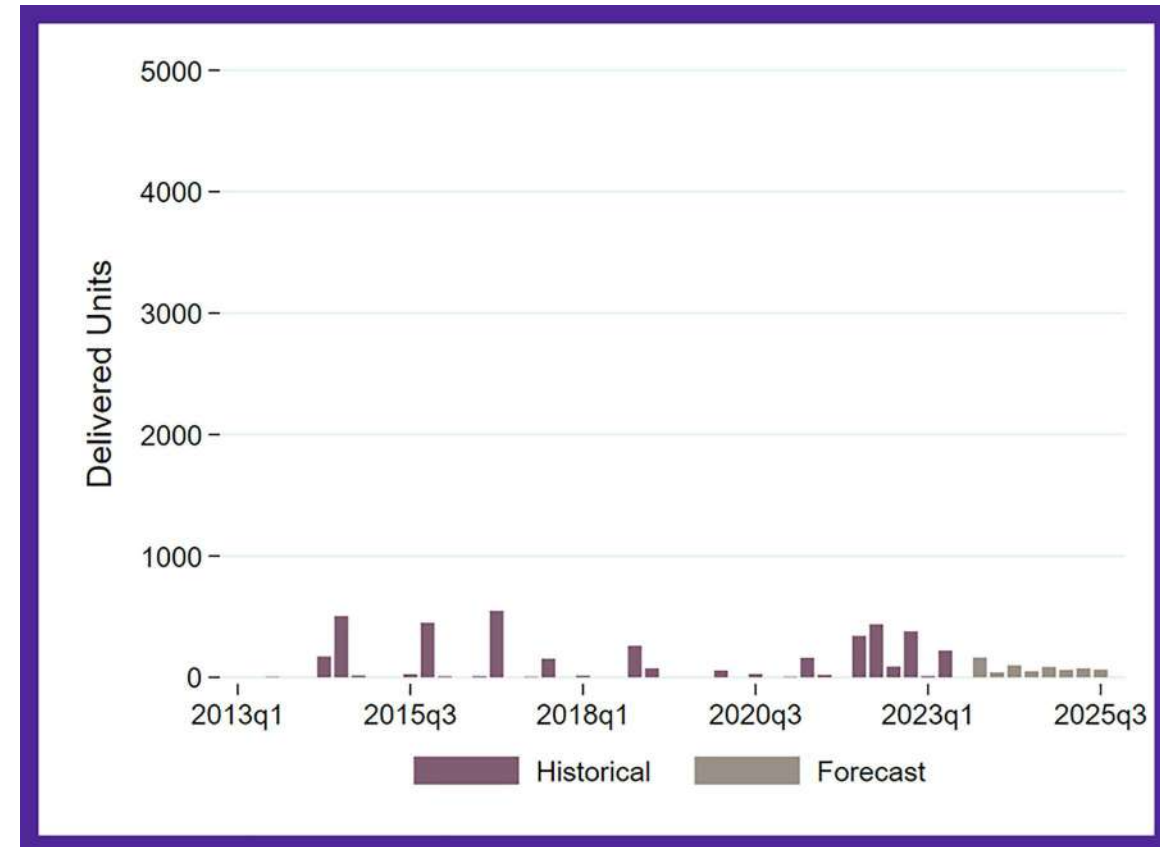
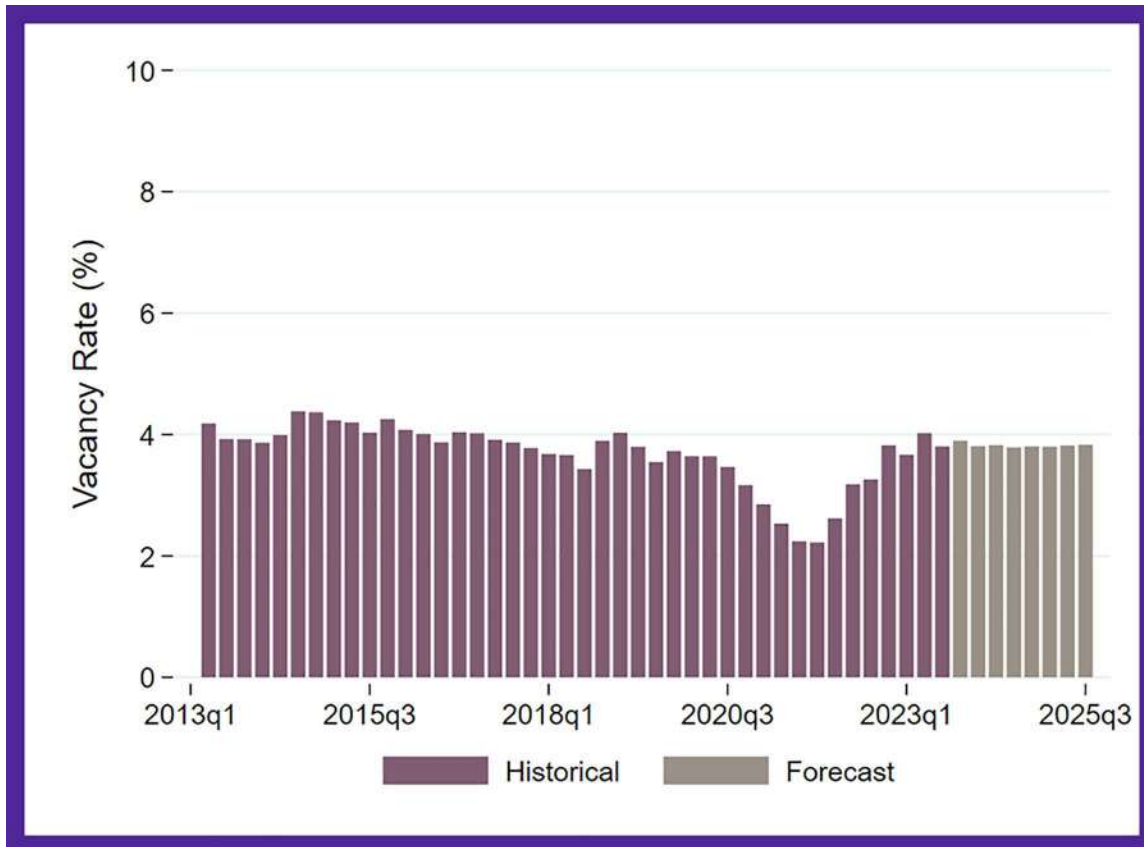
	ALL	RENTERS
RACE		
white only(%)	13.21	10.19
black only(%)	2.56	2.86
asian only(%)	31.37	23.70
hispanic(%)	49.45	59.72
other race(%)	3.40	3.53
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	14.59	17.14
highschool diploma, 18 yrs or more(%)	18.99	20.52
some college education, 18 yrs or more(%)	22.04	19.79
bachelors degree, 18 yrs or more(%)	15.55	12.01
more than bachelors degree, 18 yrs or more(%)	7.93	4.79
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		44.53
renter households living in 2-4 unit housing(%)		12.83
renter households living in 5-9 unit housing(%)		10.60
renter households living in 10-19 unit housing(%)		9.11
renter households living in 20+ unit housing(%)		20.54
renter households living in other types of housing(%)		2.39
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		51.26
renter households living in a structure built between 1970 and 1999(%)		38.73
renter households living in a structure built between 2000 and 2009(%)		5.33
renter households living in a structure built between 2010 and 2019(%)		4.37
renter households living in a structure built in 2020 and 2021(%)		0.31
HOUSEHOLD STATISTICS		
share of renter households(%)	42.66	
share of renter households living in multifamily structure(%)		40.25
share of rent-burdened households(%)		53.43
share of households with children(%)	51.21	50.14
average household size	3.27	3.14
median household income	\$80,025	\$59,736
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.89	87.46
population who moved within CA last year(%)	7.10	9.86
population who moved from other states to CA last year(%)	0.63	0.68
population who moved from abroad last year(%)	0.49	0.76

Source: 2021 1-Year American Community Survey

San Gabriel Valley Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025

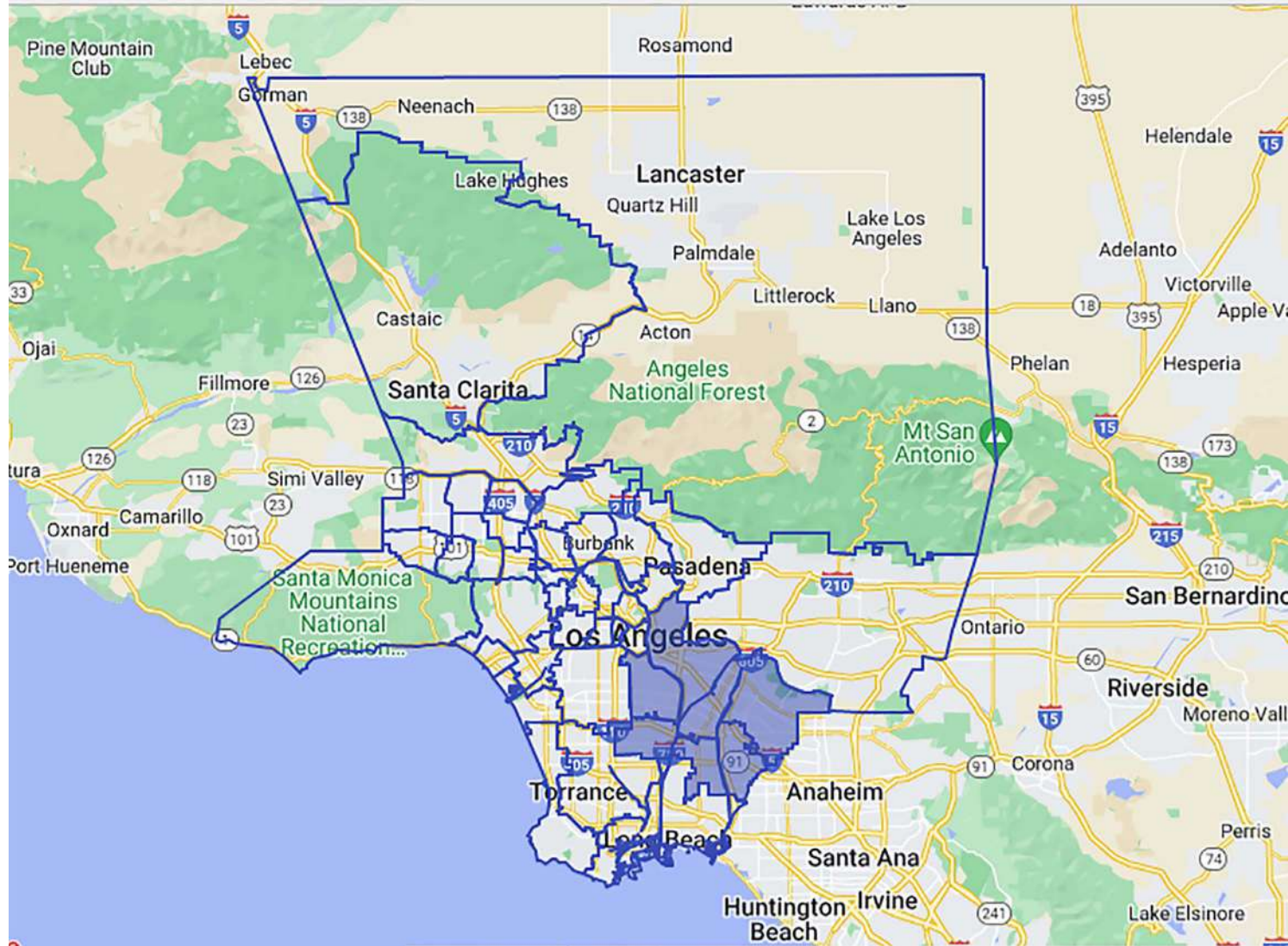


San Gabriel Valley · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Southeast Los Angeles

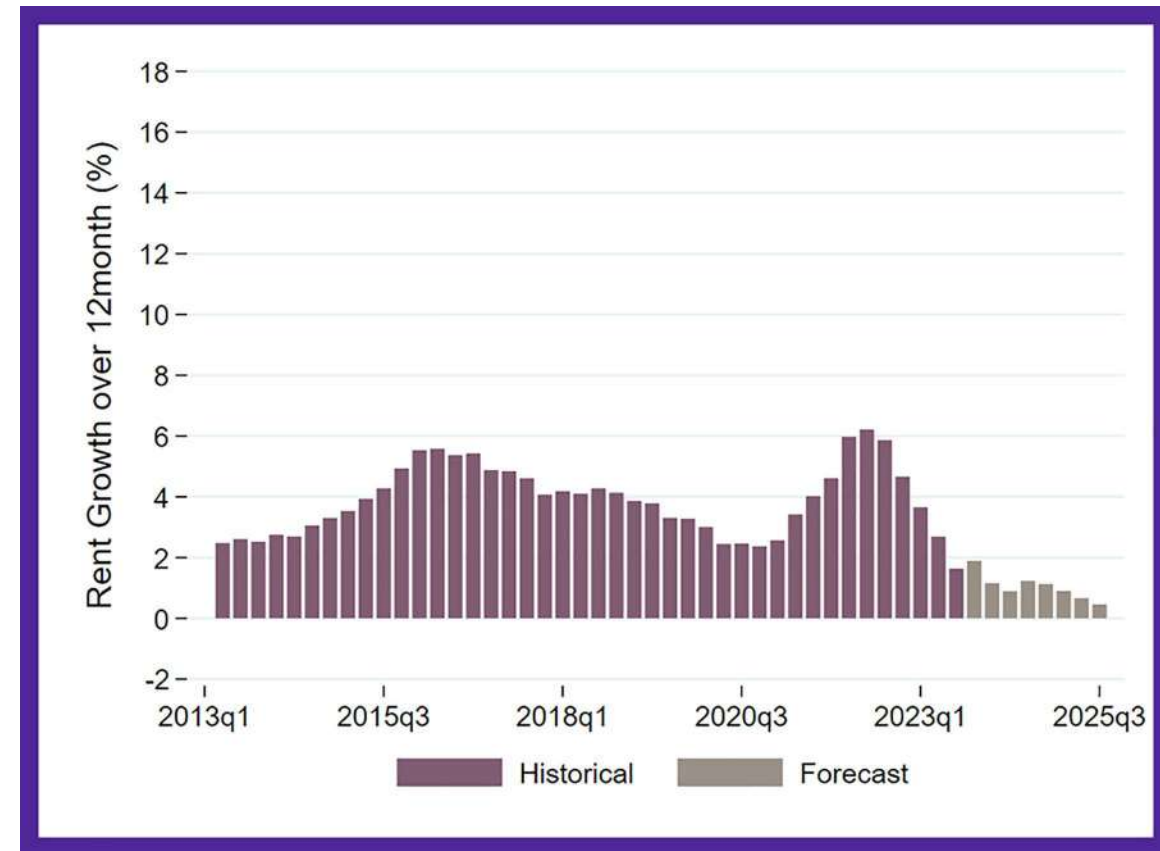
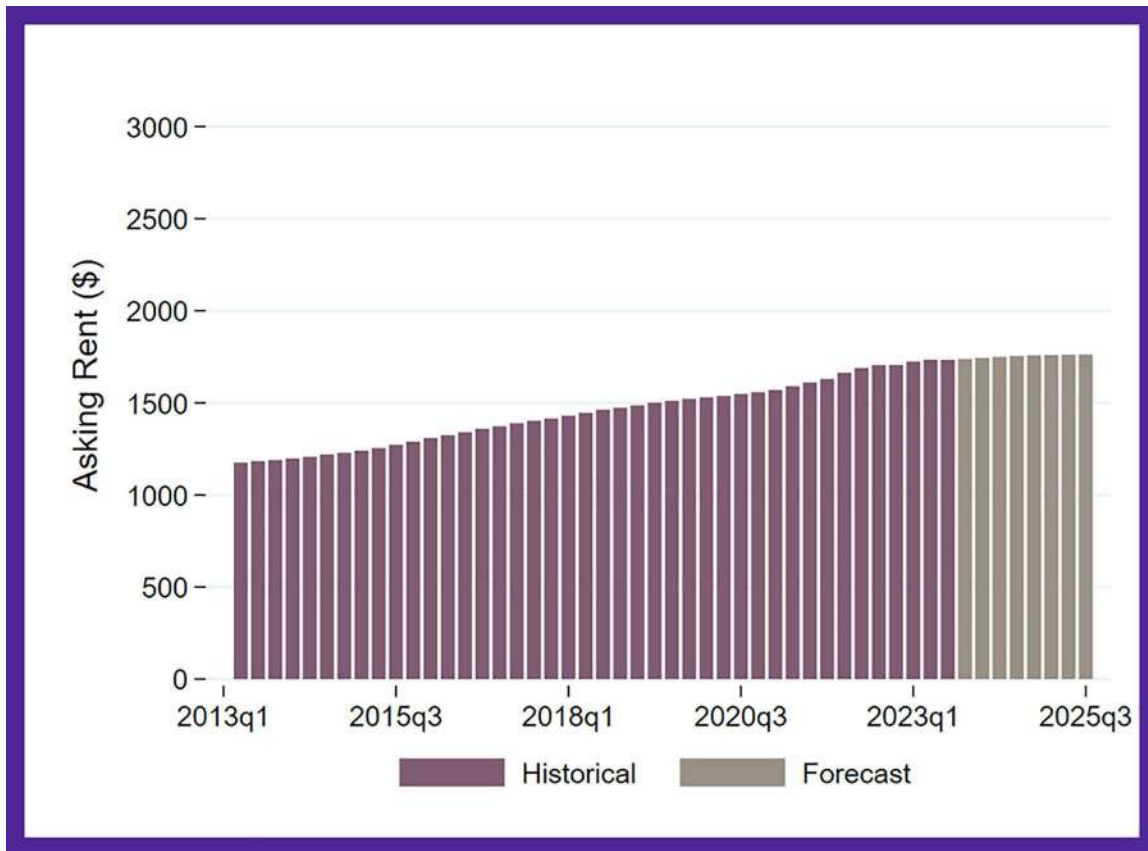


SOUTHEAST LOS ANGELES

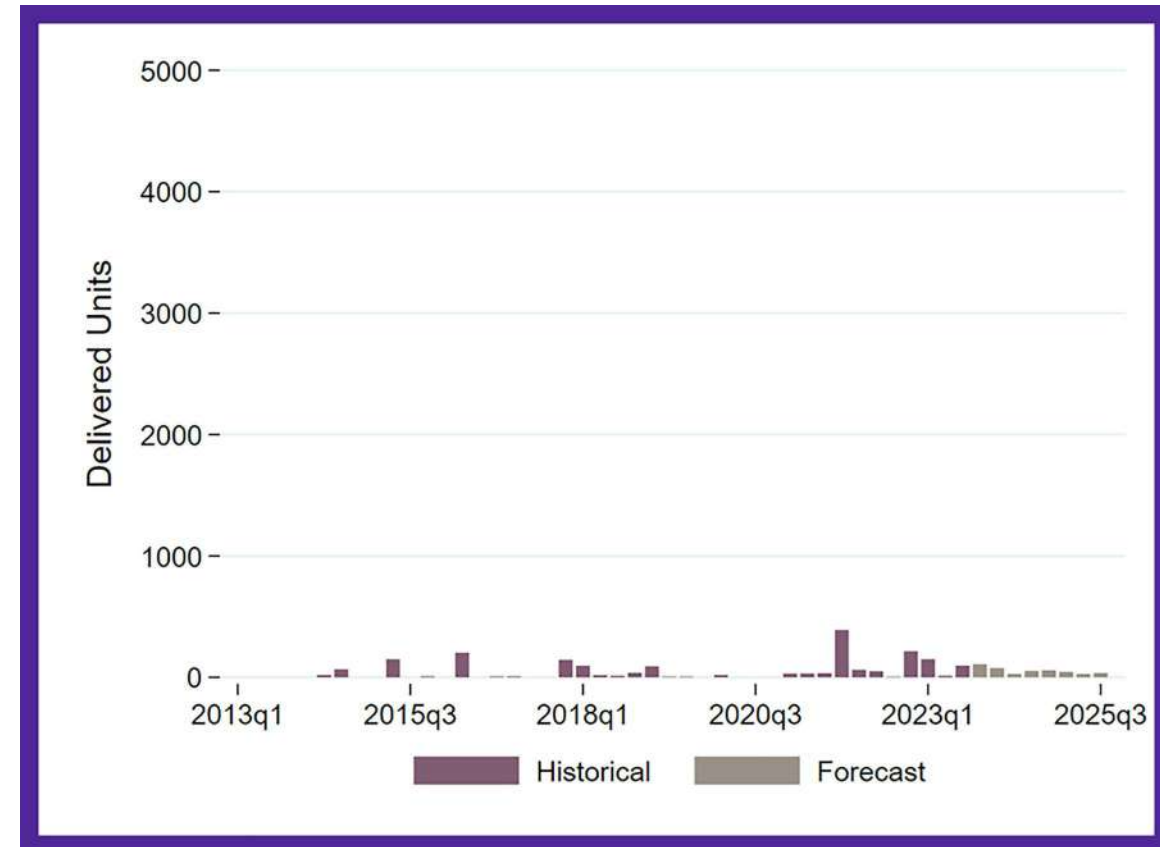
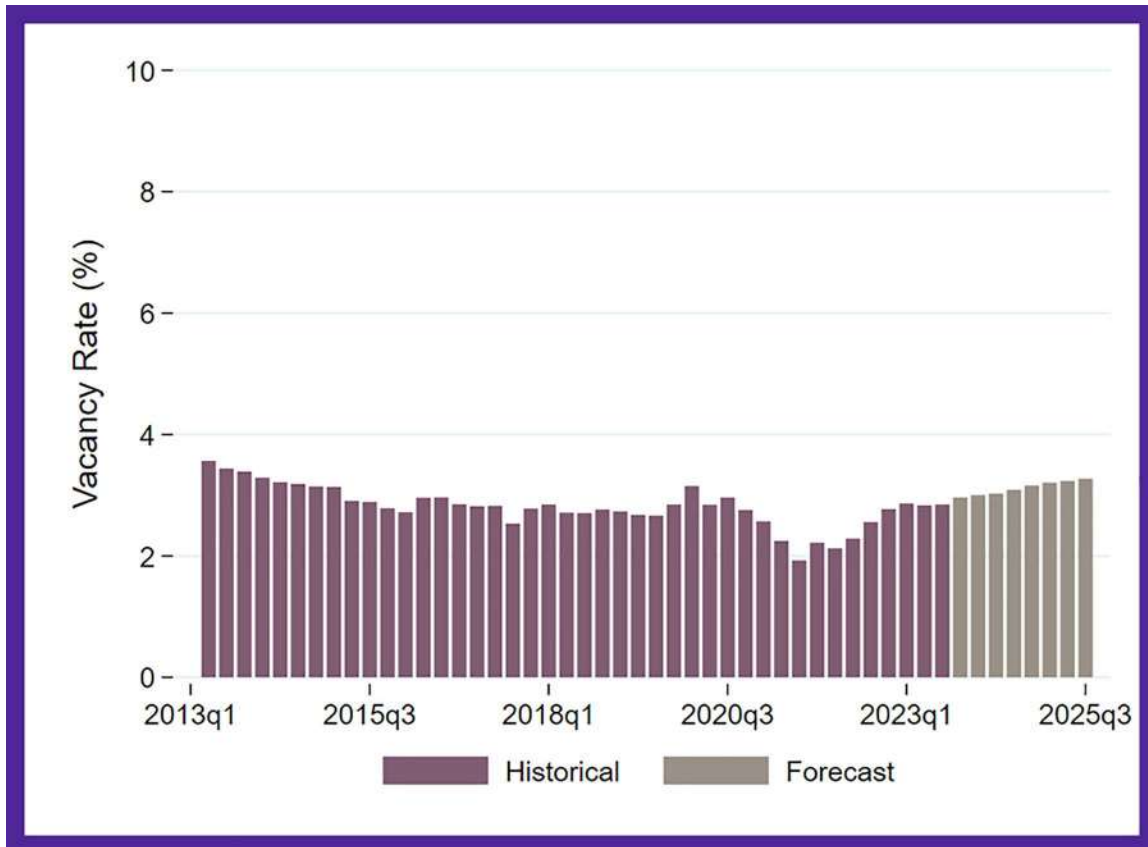
	ALL	RENTERS
RACE		
white only(%)	8.63	5.46
black only(%)	5.70	5.50
asian only(%)	8.58	6.33
hispanic(%)	75.18	81.23
other race(%)	1.91	1.48
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	21.42	23.20
highschool diploma, 18 yrs or more(%)	20.70	20.72
some college education, 18 yrs or more(%)	20.31	18.00
bachelors degree, 18 yrs or more(%)	10.22	8.02
more than bachelors degree, 18 yrs or more(%)	4.11	2.54
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		39.52
renter households living in 2-4 unit housing(%)		14.43
renter households living in 5-9 unit housing(%)		10.94
renter households living in 10-19 unit housing(%)		7.15
renter households living in 20+ unit housing(%)		26.84
renter households living in other types of housing(%)		1.12
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		56.25
renter households living in a structure built between 1970 and 1999(%)		29.54
renter households living in a structure built between 2000 and 2009(%)		5.75
renter households living in a structure built between 2010 and 2019(%)		8.18
renter households living in a structure built in 2020 and 2021(%)		0.28
HOUSEHOLD STATISTICS		
share of renter households(%)	53.21	
share of renter households living in multifamily structure(%)		44.93
share of rent-burdened households(%)		55.59
share of households with children(%)	53.03	51.34
average household size	3.42	3.21
median household income	\$69,005	\$50,878
MIGRATION STATISTICS		
population living in the same house for over a year(%)	92.45	90.82
population who moved within CA last year(%)	5.99	7.31
population who moved from other states to CA last year(%)	0.35	0.35
population who moved from abroad last year(%)	0.30	0.38

Source: 2021 1-Year American Community Survey

Southeast Los Angeles Market · Asking Rents · Rent Growth Los Angeles County, 2013-2025



Southeast Los Angeles · Vacancy · Delivered Units · Los Angeles County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Orange County



ORANGE COUNTY

	ALL	RENTERS
RACE		
white only(%)	37.58	28.93
black only(%)	1.68	2.53
asian only(%)	21.93	16.23
hispanic(%)	34.07	48.2
other race(%)	4.74	4.1
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	9.34	12.38
highschool diploma, 18 yrs or more(%)	14.73	17.05
some college education, 18 yrs or more(%)	22.58	21.8
bachelors degree, 18 yrs or more(%)	20.18	16.51
more than bachelors degree, 18 yrs or more(%)	11.73	7.72
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		29.28
renter households living in 2-4 unit housing(%)		16.6
renter households living in 5-9 unit housing(%)		10.17
renter households living in 10-19 unit housing(%)		8.92
renter households living in 20+ unit housing(%)		33.19
renter households living in other types of housing(%)		1.84
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		29.55
renter households living in a structure built between 1970 and 1999(%)		50.57
renter households living in a structure built between 2000 and 2009(%)		9.84
renter households living in a structure built between 2010 and 2019(%)		9.22
renter households living in a structure built in 2020 and 2021(%)		0.82
HOUSEHOLD STATISTICS		
share of renter households(%)	43.07	
share of renter households living in multifamily structure(%)		52.28
share of rent-burdened households(%)		53.38
share of households with children(%)	44.75	43.1
average household size	2.94	2.86
median household income	\$101,551	\$73,949
MIGRATION STATISTICS		
population living in the same house for over a year(%)	86.76	80.21
population who moved within CA last year(%)	10.39	15.89
population who moved from other states to CA last year(%)	1.19	1.78
population who moved from abroad last year(%)	0.62	0.84

Source: 2021 1-Year American Community Survey

Orange County

Not much has changed about Orange County in recent years. Orange County has a robust and well-diversified economy that is one of the strongest in the country. Except for oil and natural resources, all major sectors are represented in the economy with employment location quotients tightly clustered around 1. That said, Orange County remains a leader in manufacturing, healthcare, retail, finance and real estate, tourism and entertainment, and education. The strength of its economy has made its residents among the wealthiest in the nation.

Median household income rose by 3.2% over the last two years to \$101,551, which is 21% higher than the state of California and 46% higher than the US median household income. Orange County renters have also a significantly higher median household income than the country as a whole (\$73,949 vs. \$43,500 in 2021). Even though the county's unemployment rate slightly edged up with the rest of the economy to 3.9%, it is lower than the state average unemployment rate of 4.9%.

COMPARED TO THE INLAND EMPIRE, WHICH HAS A SMALLER POPULATION, ORANGE COUNTY IS NOT ADDING MORE HOUSING, DESPITE ITS SIGNIFICANTLY HIGHER RENTS.

Orange County has a reputation for being more business-friendly than its larger neighbor, Los Angeles County. As a result, it continues to gain residents from Los Angeles County. Approximately 23,000 Los Angeles County residents moved to Orange County in 2021. But overall, Orange County experienced a net population outflow of 9,500 in 2021, up from 5,400 the previous year. It lost 12,300 residents to the more affordable Inland Empire in 2021 and experienced a smaller number of out-migration (3,300) to San Diego County as well. The cost of housing in Orange County, both rental and owner, is so high that people are leaving for cheap regions in Southern California like the Inland Empire or other states, mainly Nevada and Texas.

Compared to the Inland Empire, which has a smaller population, Orange County is not adding more housing, despite its significantly higher rents. The county issued about 5,000 permits, evenly split between single-family and multifamily units, in the first 9 months of last year. This was equal to the average number of permits issued in the previous two years. We forecast the multifamily units supplied in the next two years to remain at the current level of approximately 650 per quarter or 2,600 annually. Given the limited amount of new supply added, rent per unit is expected to grow at 4% on average over the next two years from \$2,662 to \$2,837 with vacancy remaining stable at around 4%.

Orange County will outperform the other markets in terms of rent growth over the next two years, with Ventura County coming as a close second. However, as housing continues to become less affordable, more people are bound to leave the region in favor of more affordable areas in the Inland Empire.

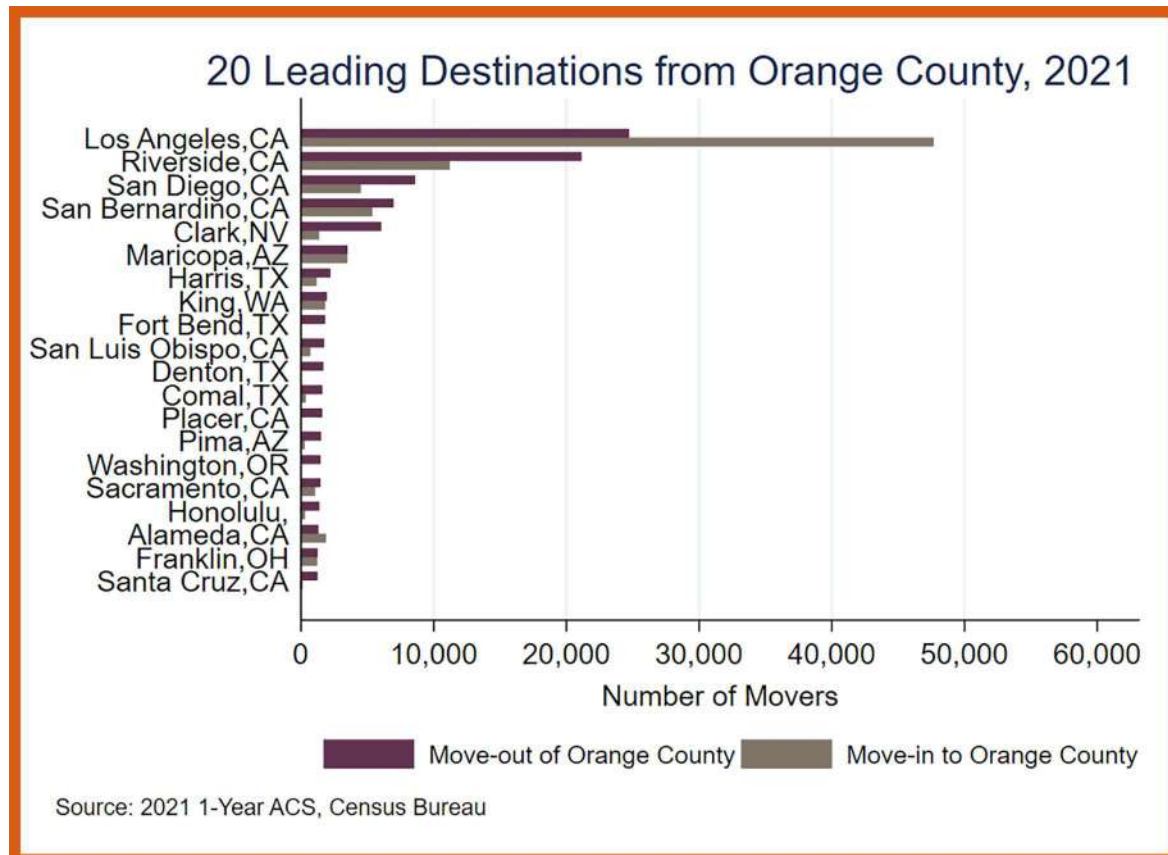
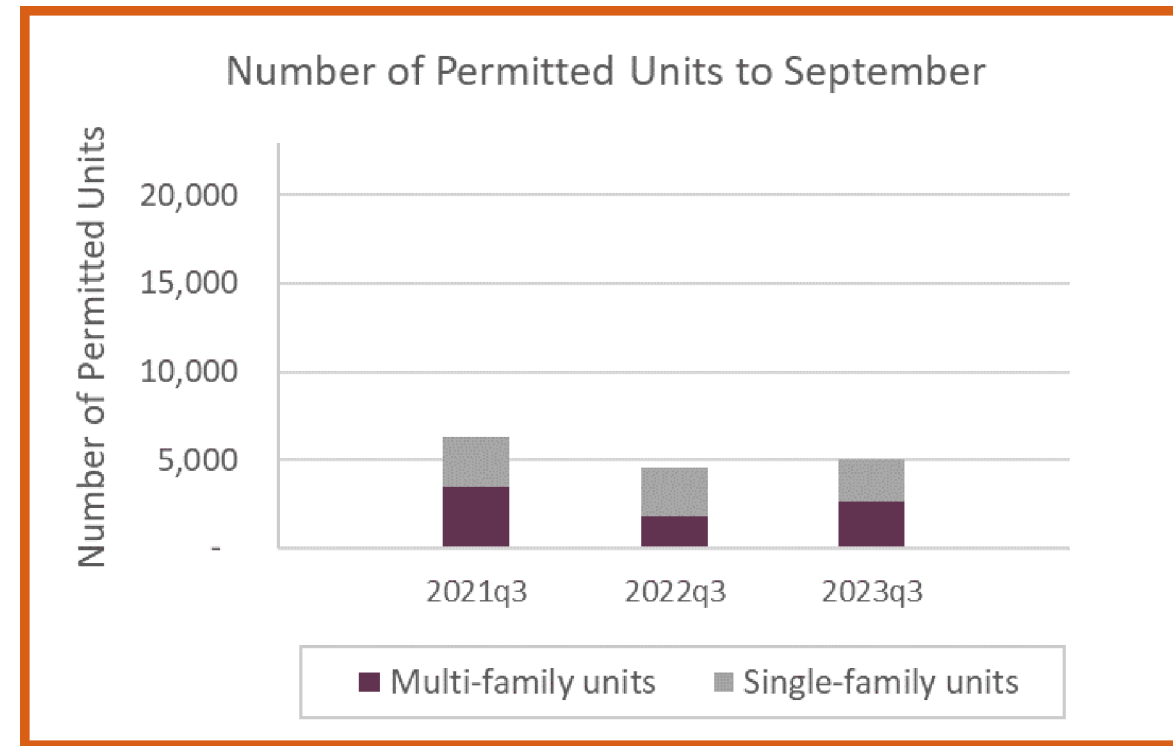
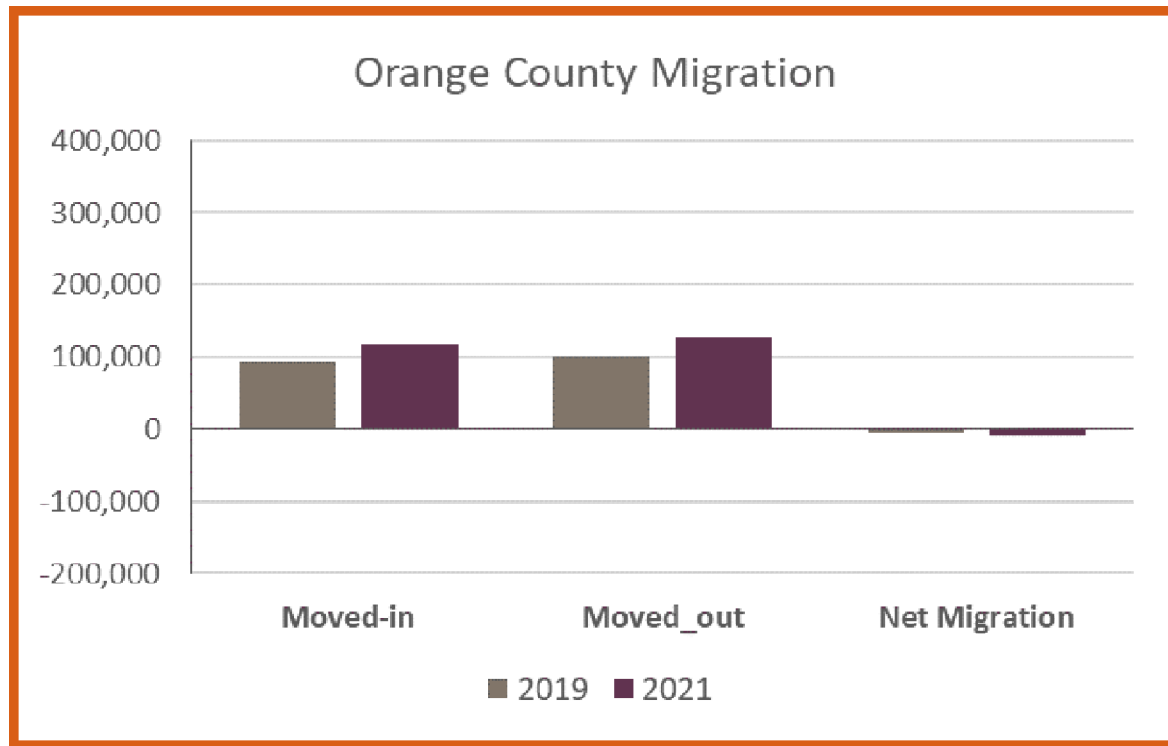
EMPLOYMENT LOCATION QUOTIENTS, 2023 1ST QUARTER

INDUSTRY • ORANGE COUNTY

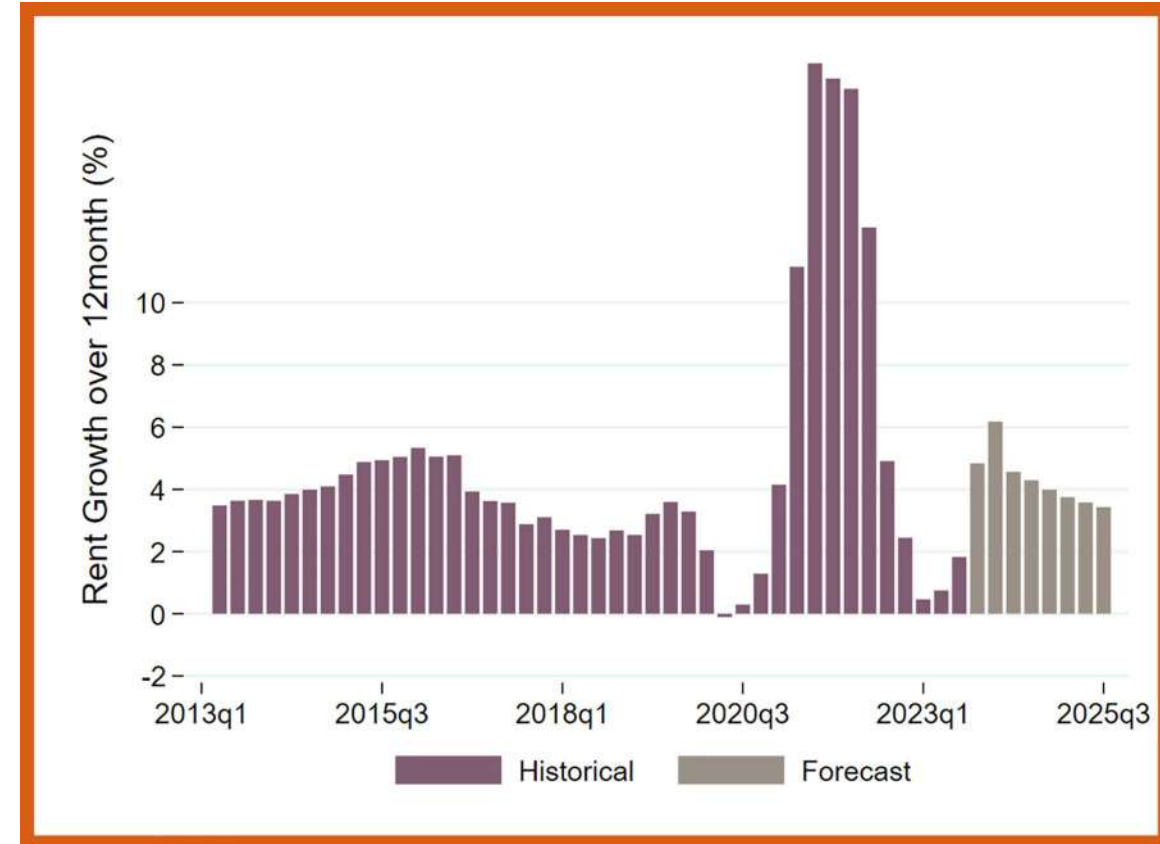
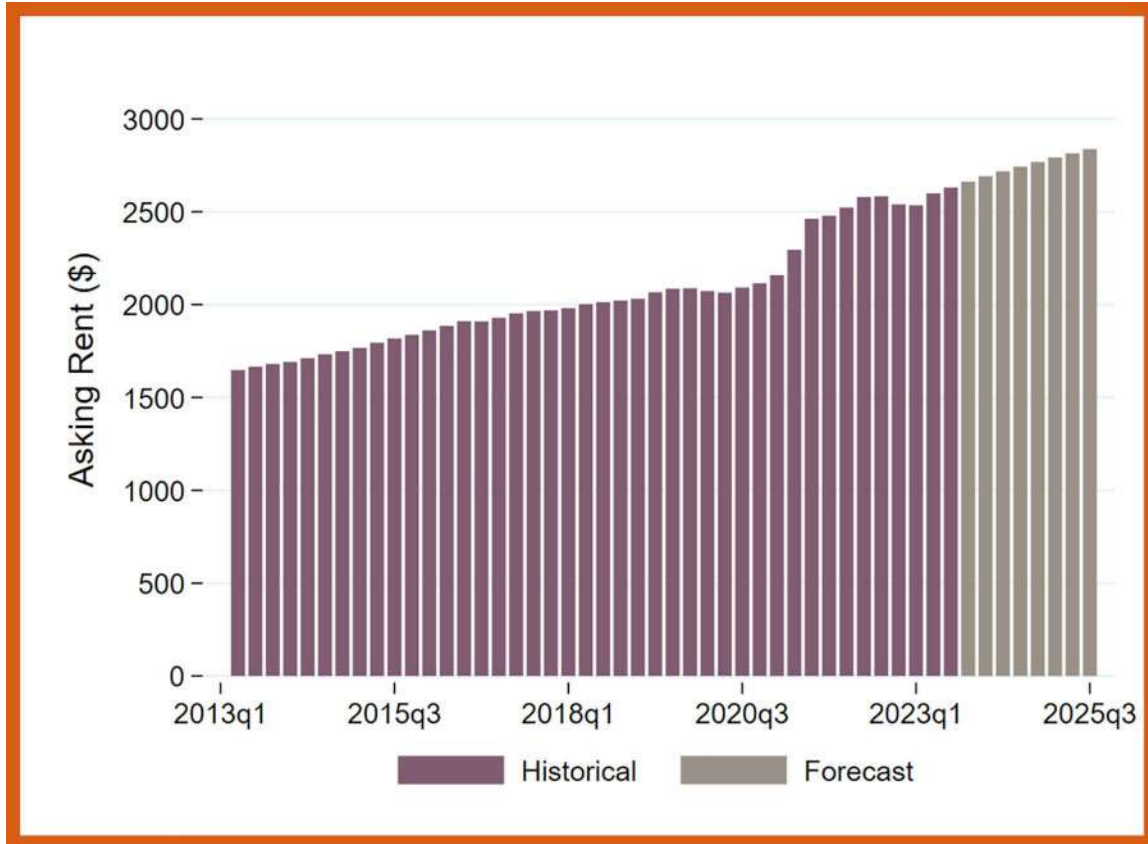
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Goods-producing	1.08
Natural resources and mining	0.11
Construction	1.24
Manufacturing	1.12
Service-providing	1.06
Trade, transportation, and utilities	0.84
Information	0.68
Financial activities	1.09
Professional and business services	1.30
Education and health services	0.96
Leisure and hospitality	1.31
Other services	1.03
Unclassified	0.39

Source: U.S. Bureau of Labor Statistics

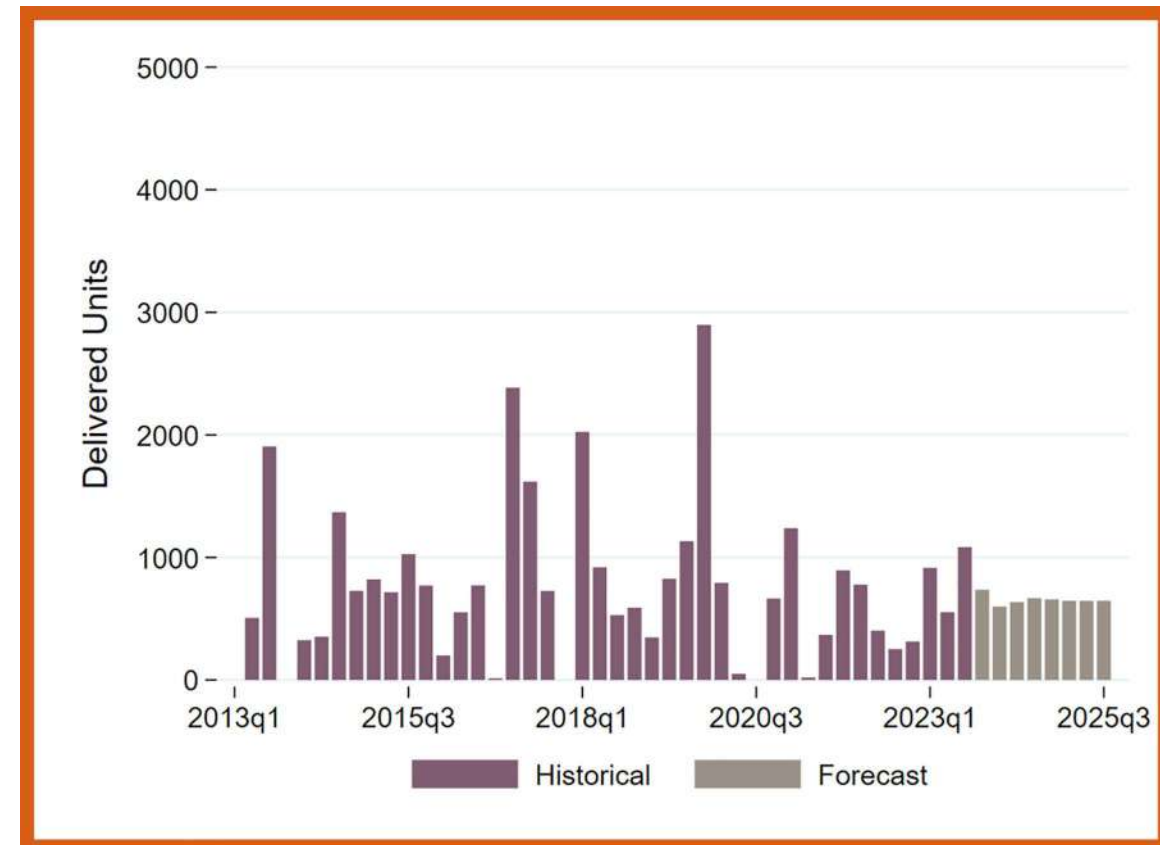
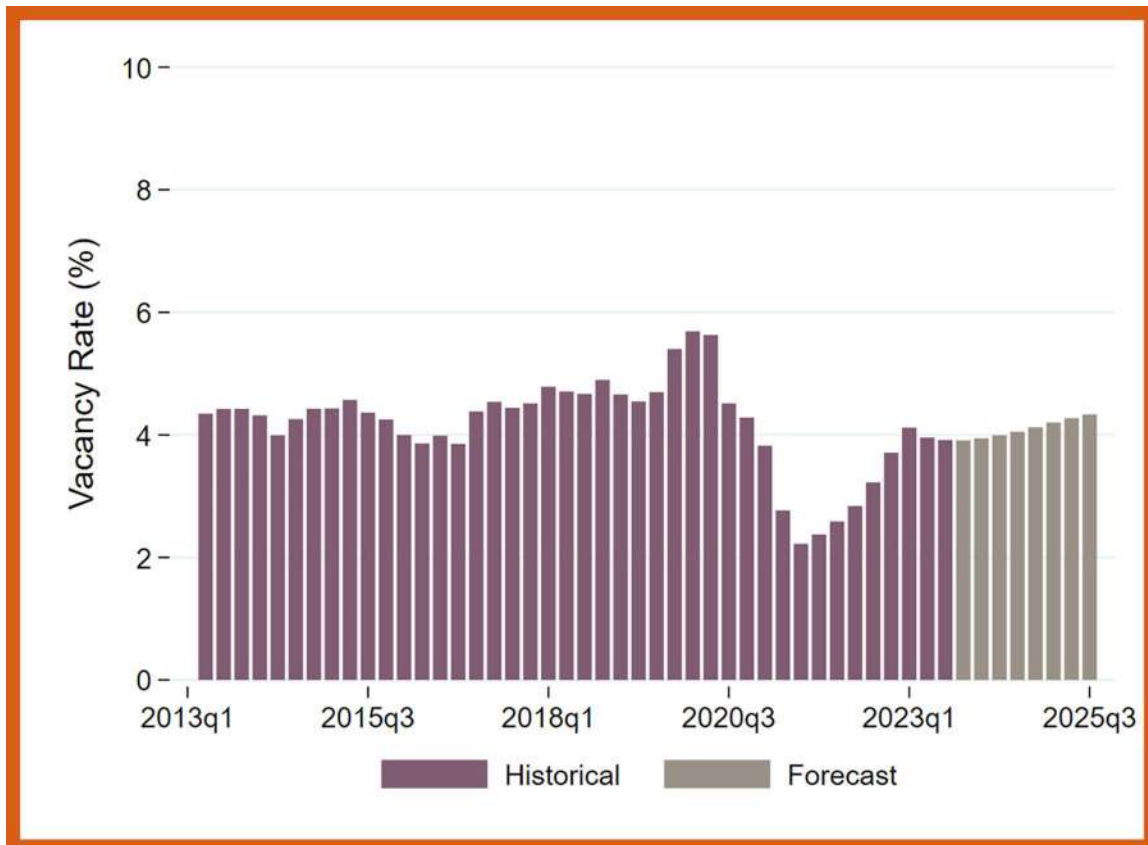
Migration · Orange County, 2019 & 2021



Orange County Asking Rents · Rent Growth Orange County, 2013-2025

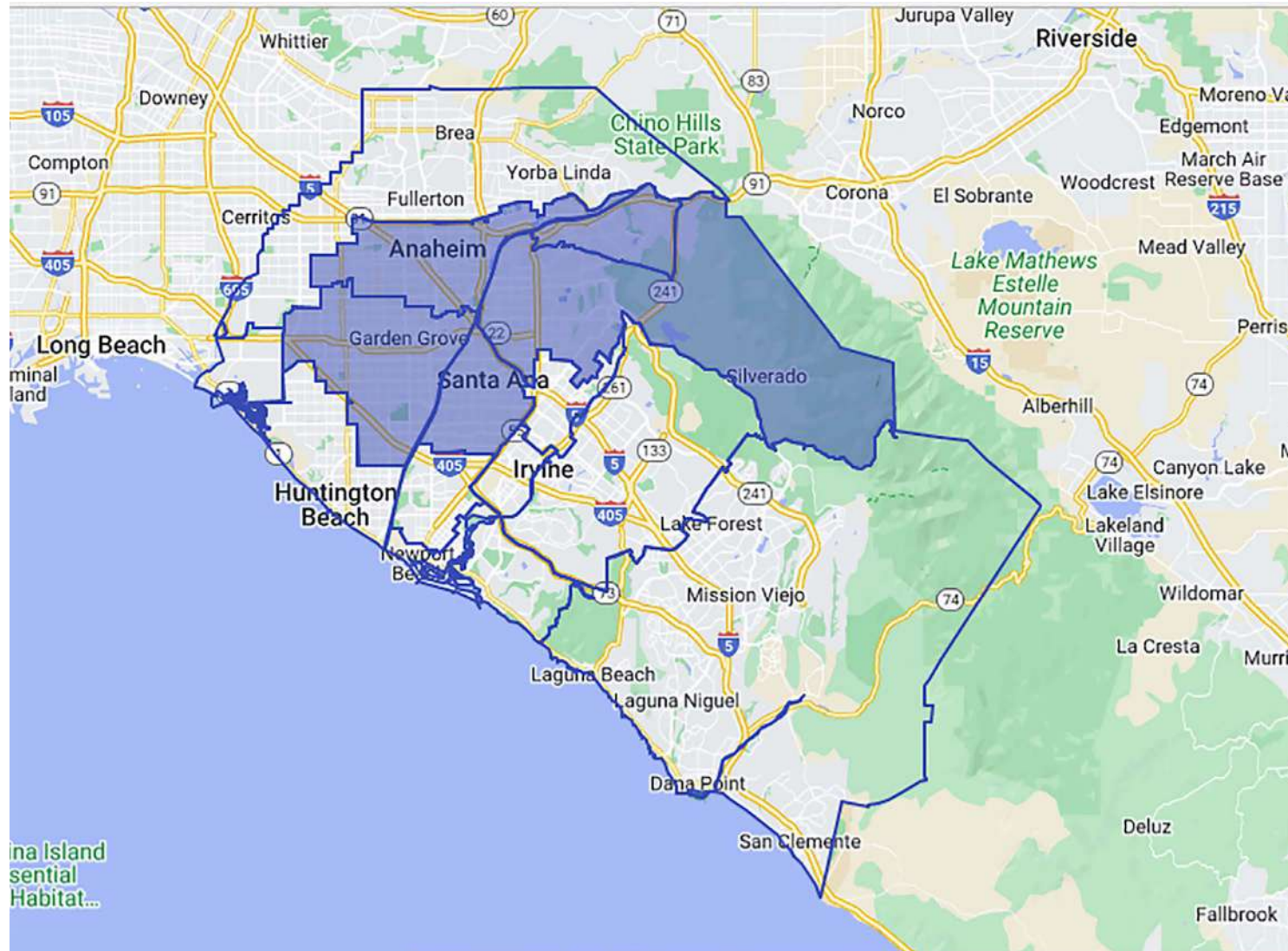


Orange County Vacancy · Delivered Units · Orange County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Anaheim/Santa Ana

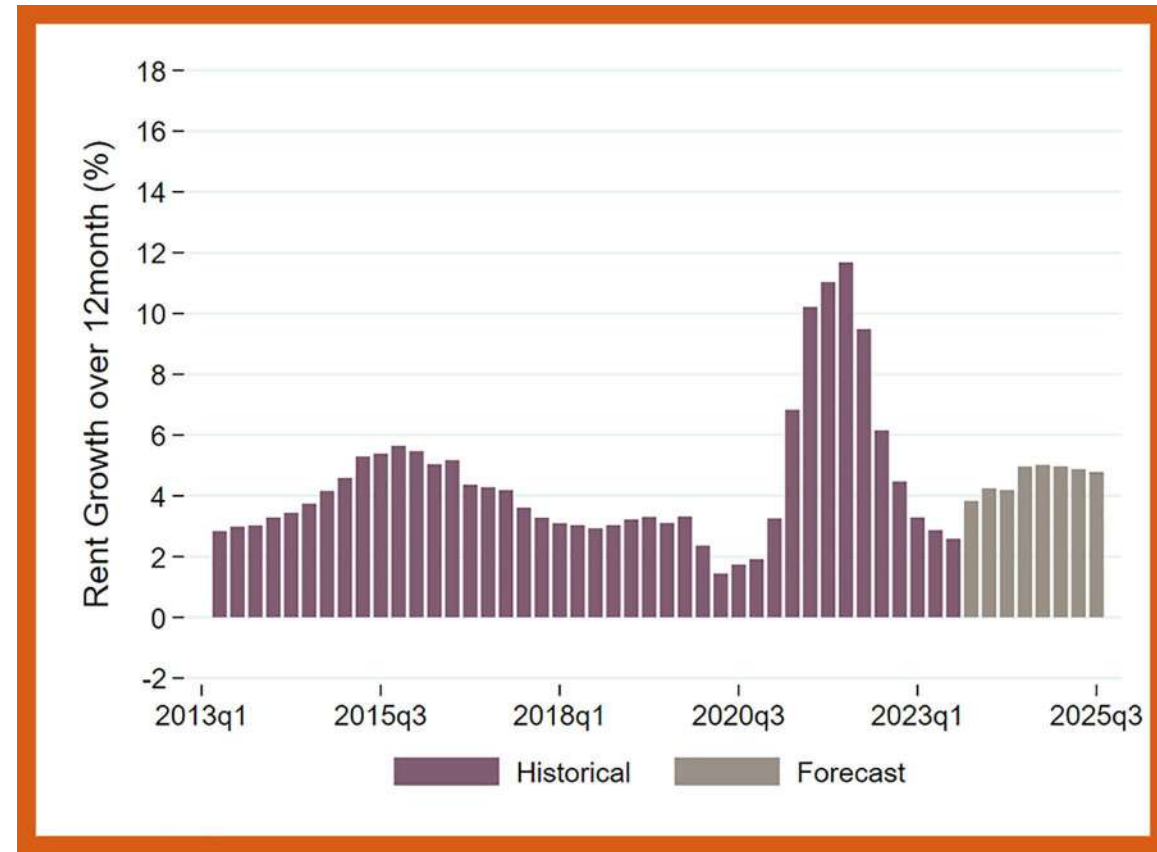
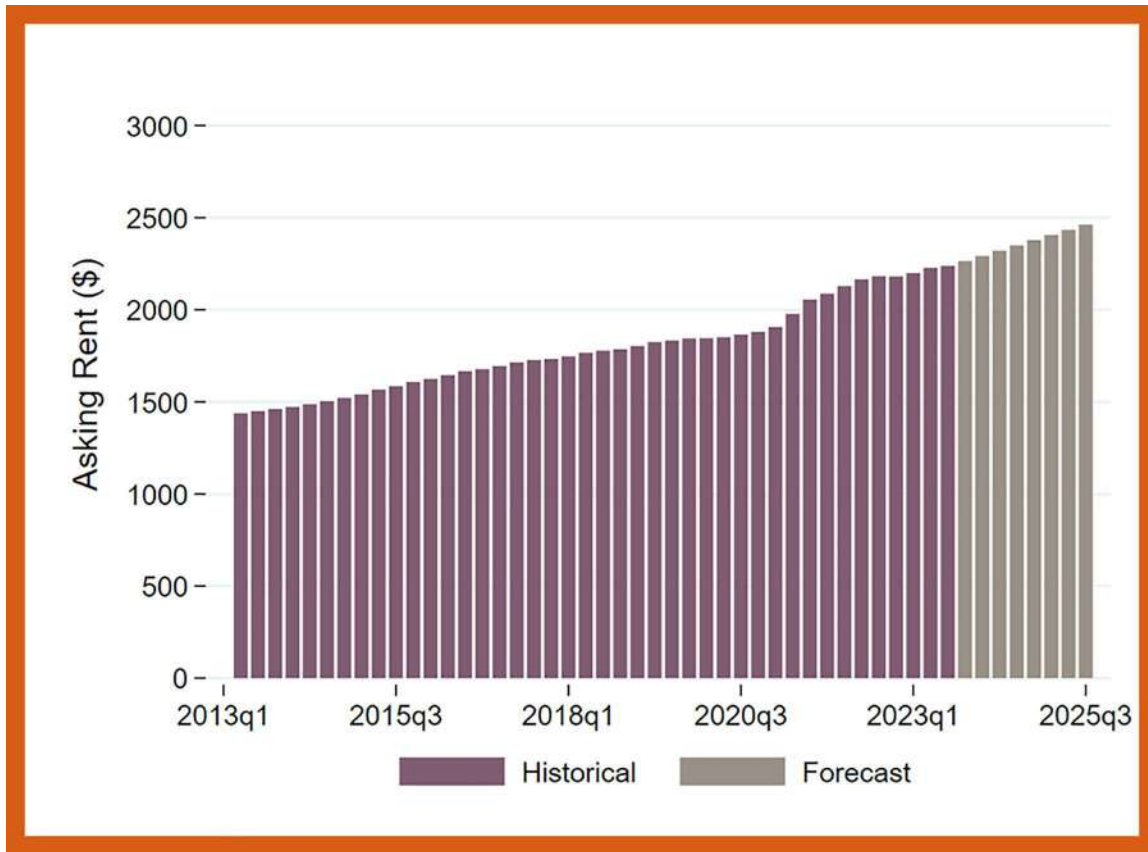


ANAHEIM - SANTA ANA

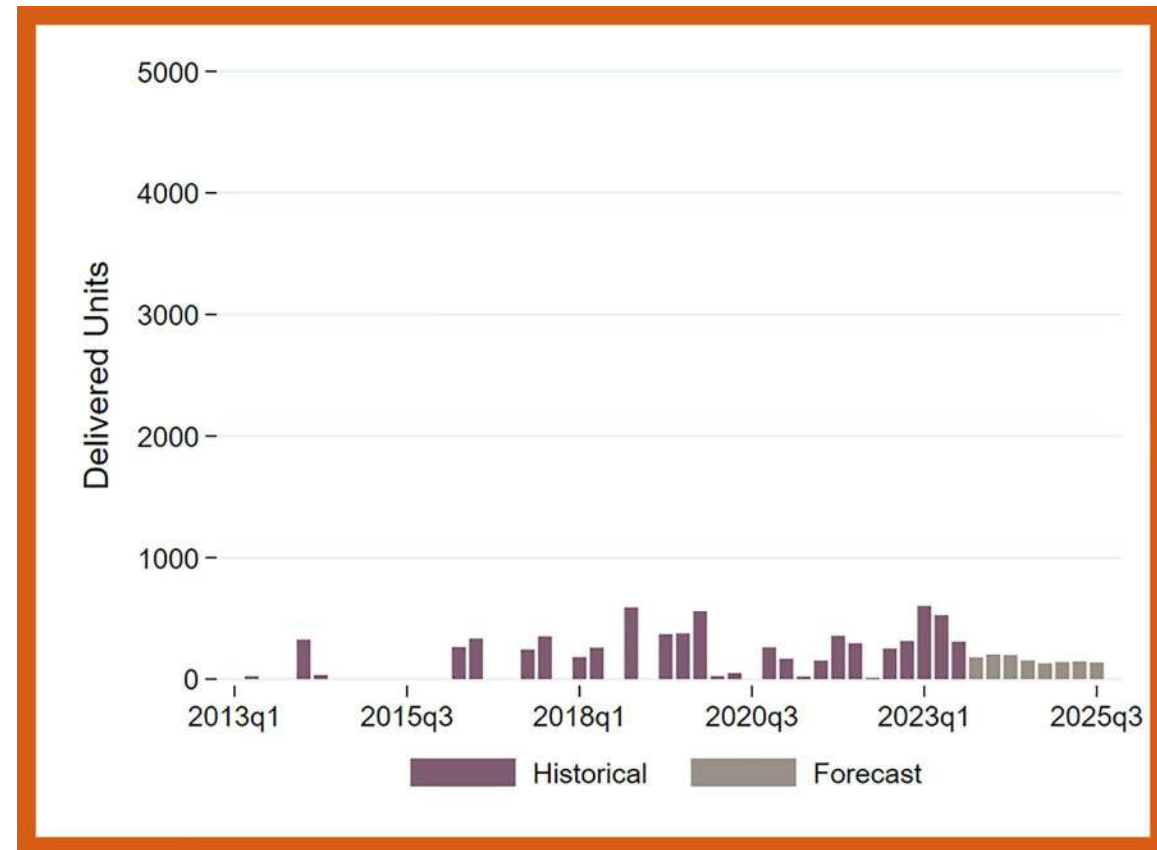
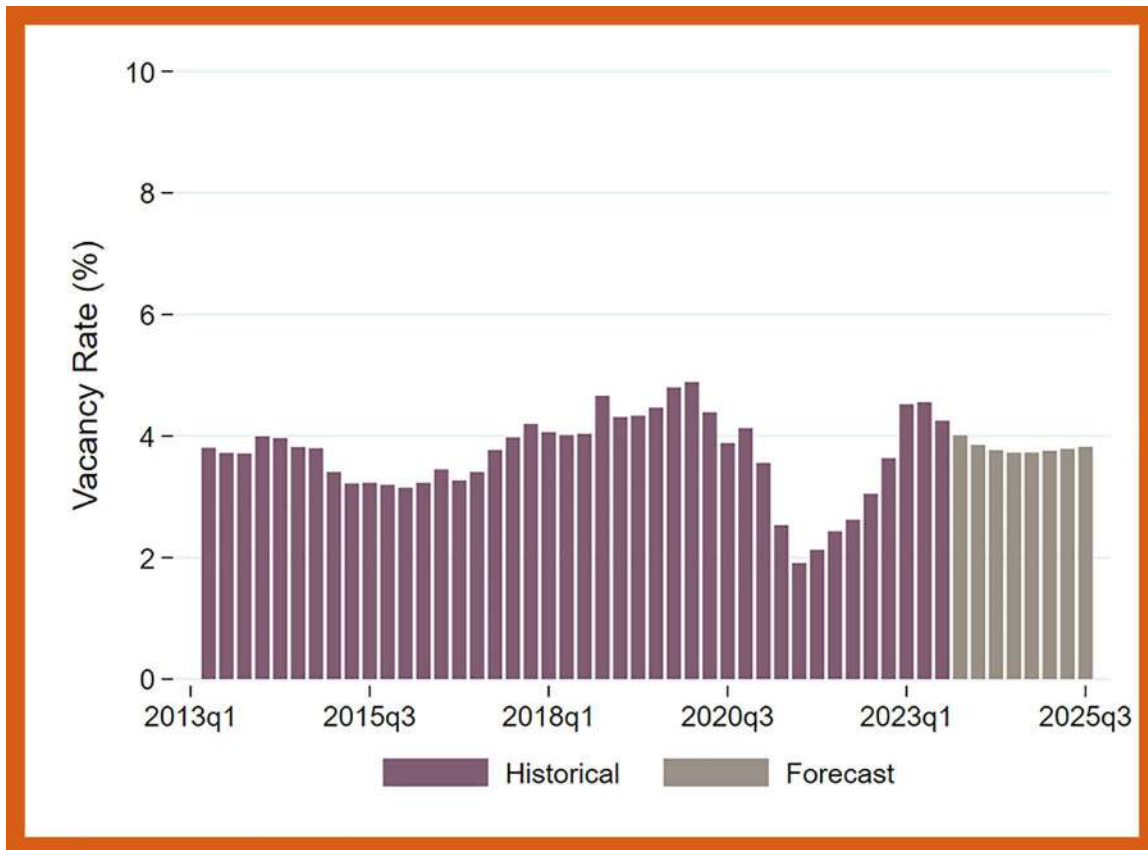
	ALL	RENTERS
RACE		
white only(%)	22.56	15.44
black only(%)	1.52	1.94
asian only(%)	24.39	17.75
hispanic(%)	48.14	62.17
other race(%)	3.39	2.70
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	14.81	17.60
highschool diploma, 18 yrs or more(%)	17.84	19.79
some college education, 18 yrs or more(%)	22.04	20.40
bachelors degree, 18 yrs or more(%)	14.90	10.80
more than bachelors degree, 18 yrs or more(%)	7.58	4.96
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		28.17
renter households living in 2-4 unit housing(%)		15.30
renter households living in 5-9 unit housing(%)		10.40
renter households living in 10-19 unit housing(%)		9.58
renter households living in 20+ unit housing(%)		32.87
renter households living in other types of housing(%)		3.68
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		37.54
renter households living in a structure built between 1970 and 1999(%)		45.35
renter households living in a structure built between 2000 and 2009(%)		8.19
renter households living in a structure built between 2010 and 2019(%)		8.24
renter households living in a structure built in 2020 and 2021(%)		0.67
HOUSEHOLD STATISTICS		
share of renter households(%)	46.78	
share of renter households living in multifamily structure(%)		52.85
share of rent-burdened households(%)		56.63
share of households with children(%)	52.36	52.18
average household size	3.39	3.33
median household income	\$87,544	\$63,856
MIGRATION STATISTICS		
population living in the same house for over a year(%)	89.28	85.73
population who moved within CA last year(%)	8.67	11.96
population who moved from other states to CA last year(%)	0.67	0.75
population who moved from abroad last year(%)	0.30	0.32

Source: 2021 1-Year American Community Survey

Anaheim/Santa Ana Market · Asking Rents · Rent Growth · Orange County, 2013-2025

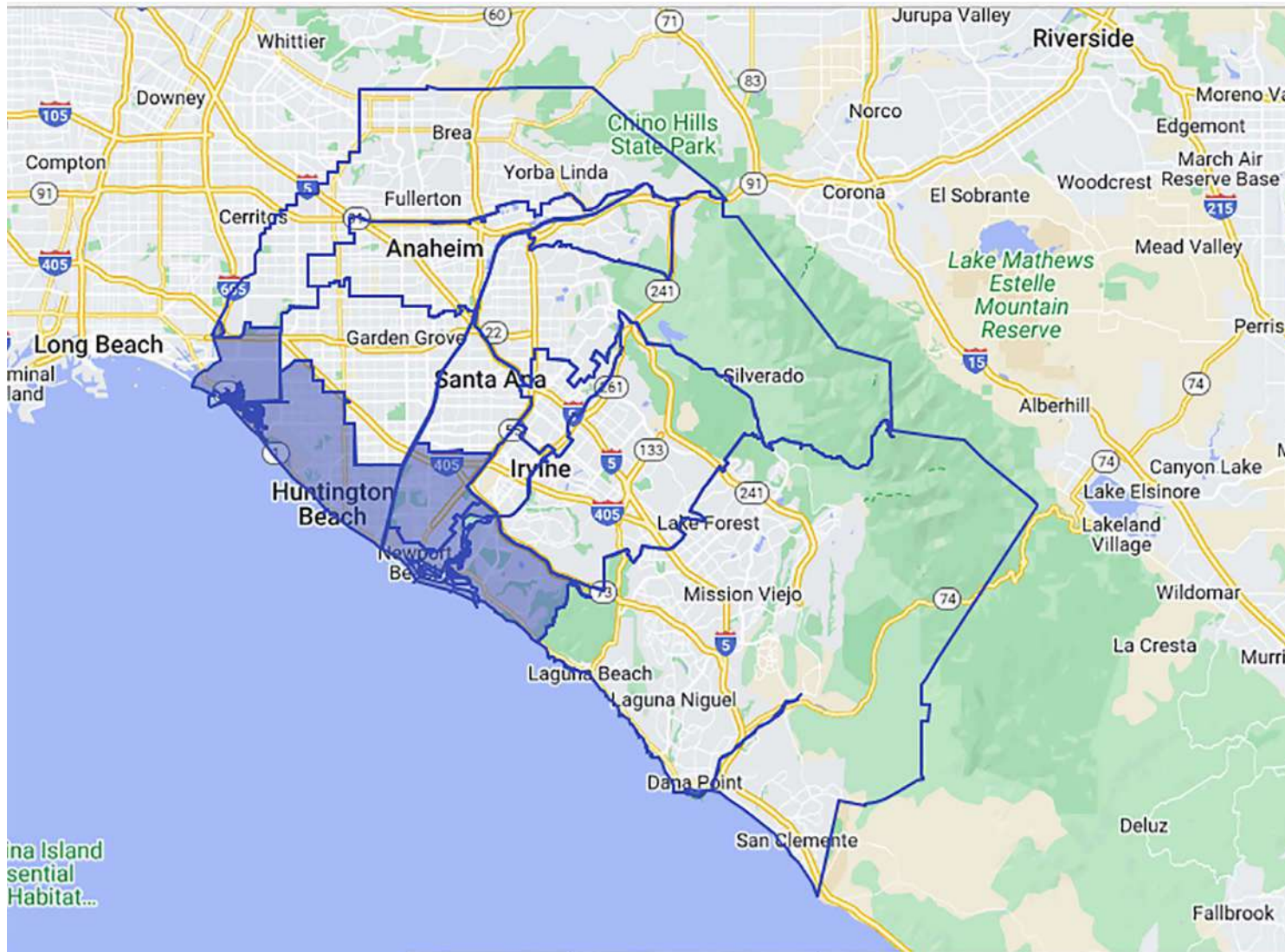


Anaheim/Santa Ana Vacancy · Delivered Units · Orange County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Coastal Communities

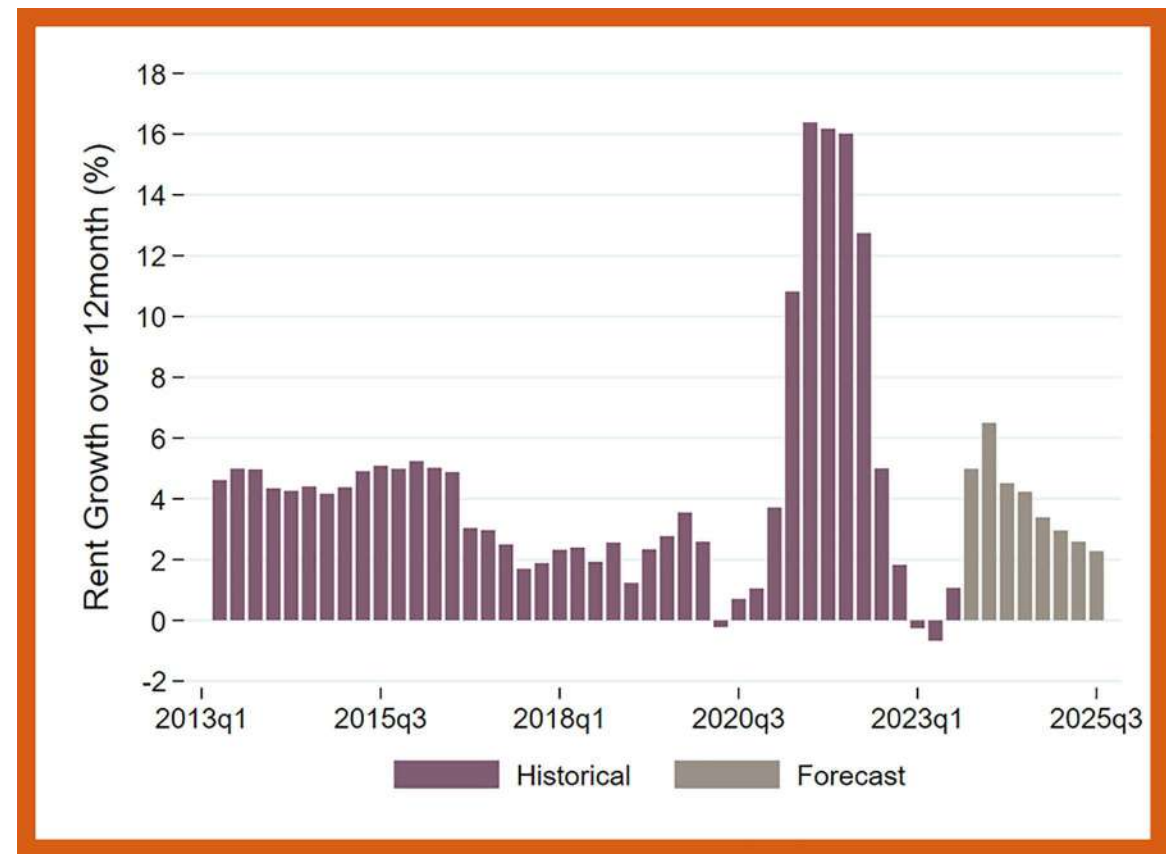
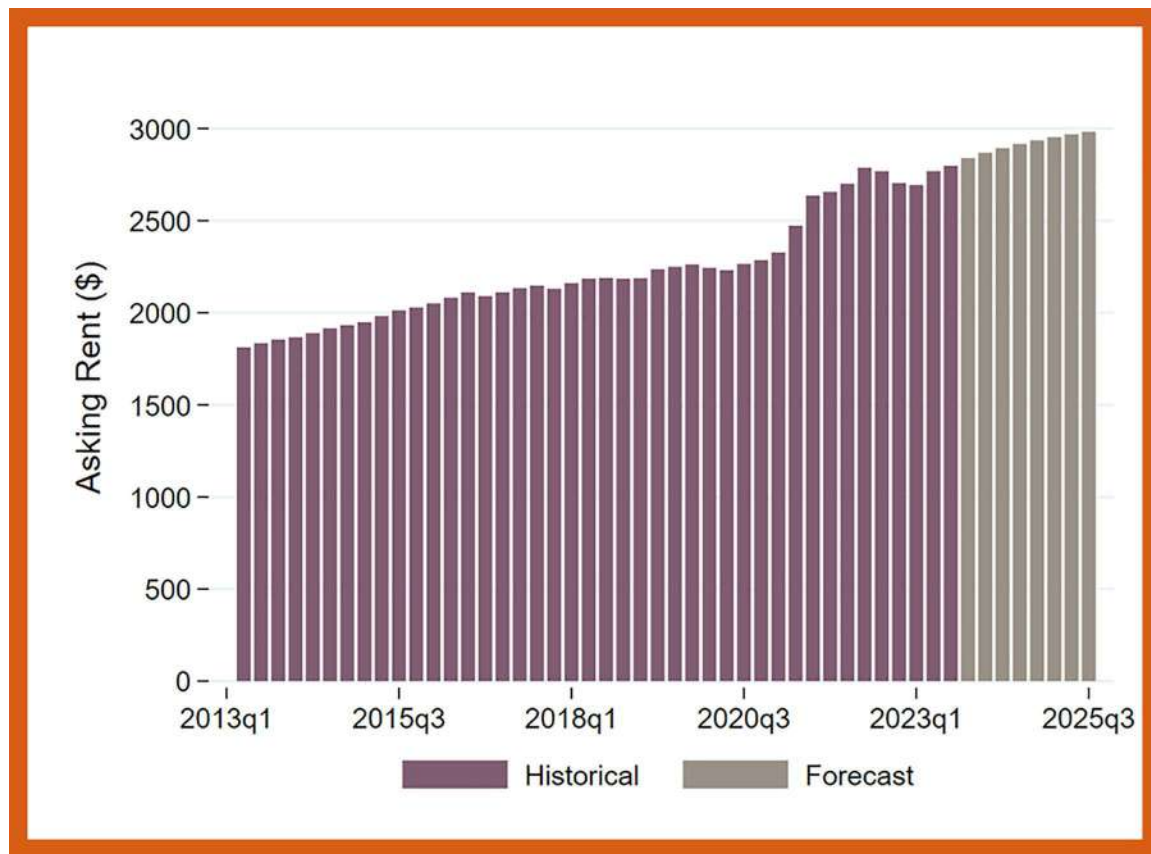


COASTAL COMMUNITIES

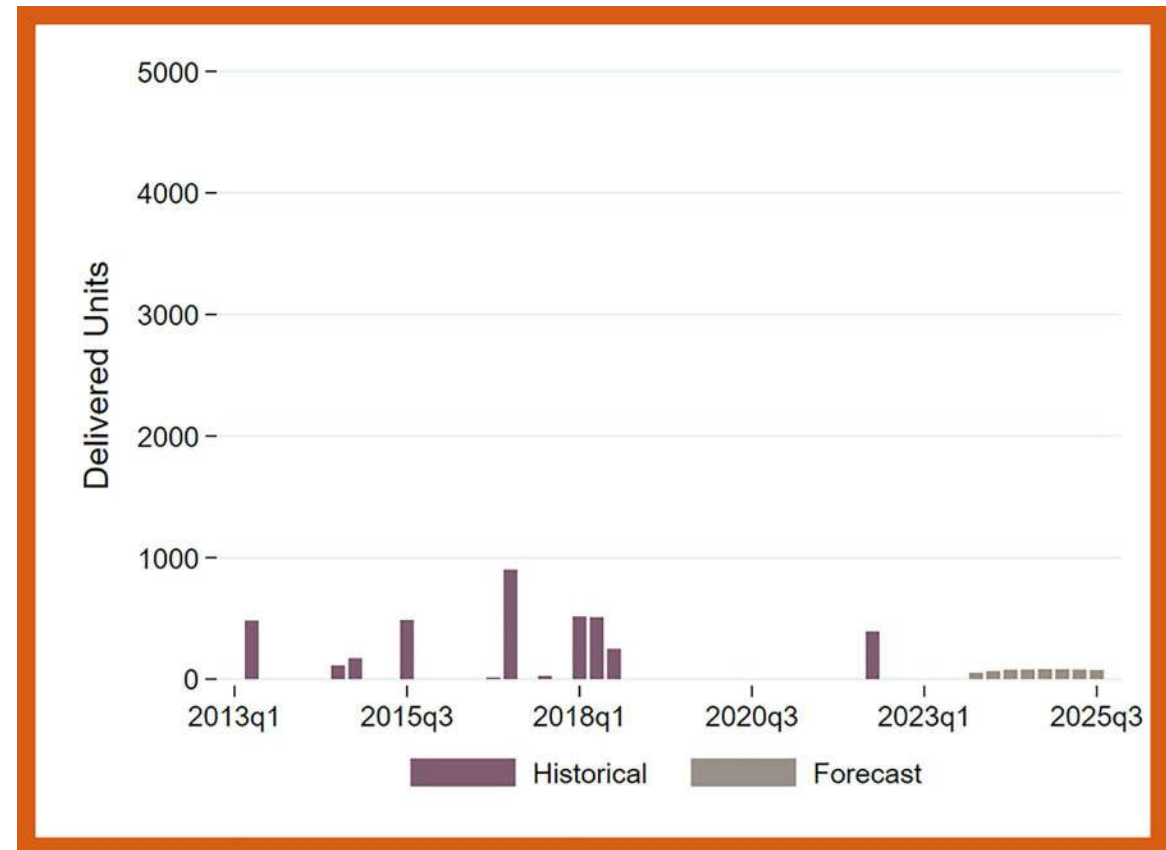
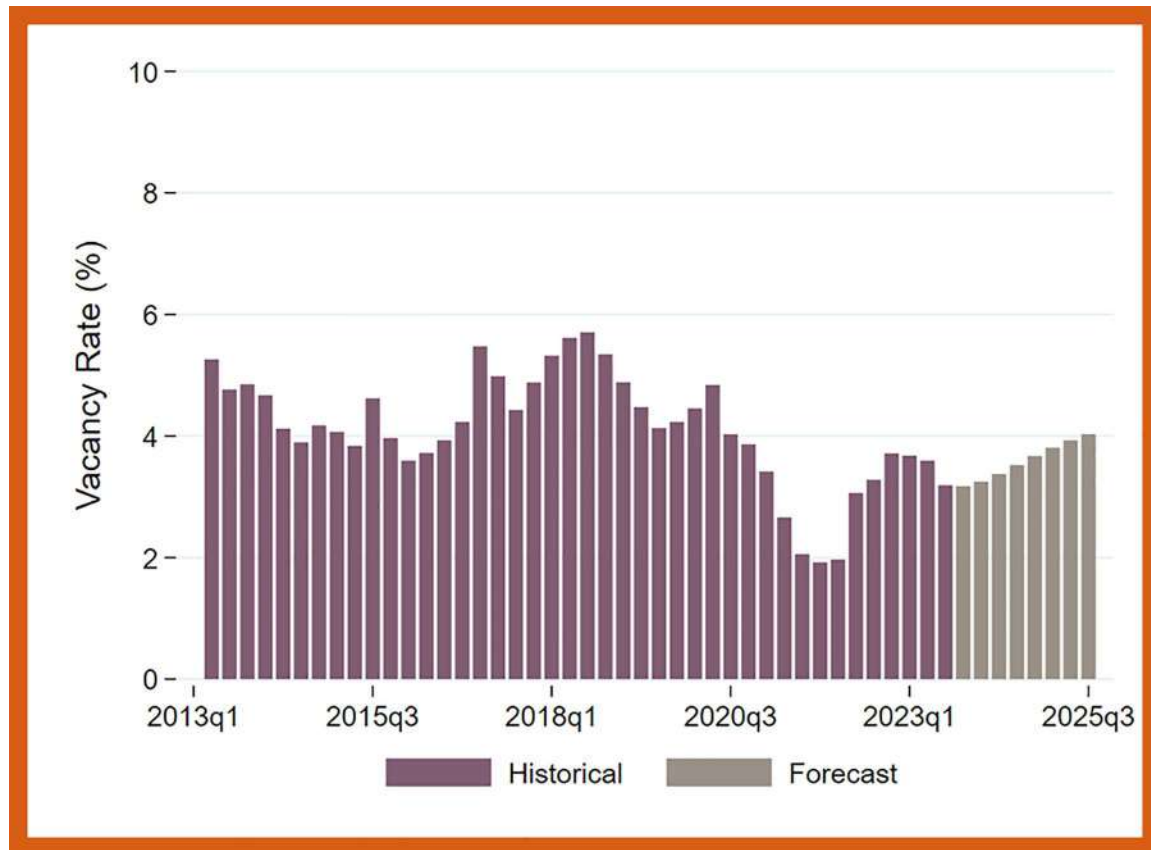
	ALL	RENTERS
RACE		
white only(%)	57.48	51.28
black only(%)	1.51	3.07
asian only(%)	14.81	10.48
hispanic(%)	19.66	29.40
other race(%)	6.54	5.77
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	4.84	6.01
highschool diploma, 18 yrs or more(%)	12.40	14.99
some college education, 18 yrs or more(%)	22.61	21.76
bachelors degree, 18 yrs or more(%)	26.42	25.32
more than bachelors degree, 18 yrs or more(%)	15.18	10.16
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		28.81
renter households living in 2-4 unit housing(%)		21.00
renter households living in 5-9 unit housing(%)		9.43
renter households living in 10-19 unit housing(%)		8.53
renter households living in 20+ unit housing(%)		31.62
renter households living in other types of housing(%)		0.61
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		28.98
renter households living in a structure built between 1970 and 1999(%)		54.45
renter households living in a structure built between 2000 and 2009(%)		6.78
renter households living in a structure built between 2010 and 2019(%)		9.36
renter households living in a structure built in 2020 and 2021(%)		0.44
HOUSEHOLD STATISTICS		
share of renter households(%)	44.35	
share of renter households living in multifamily structure(%)		49.58
share of rent-burdened households(%)		49.24
share of households with children(%)	33.52	31.27
average household size	2.45	2.35
median household income	\$106,289	\$87,544
MIGRATION STATISTICS		
population living in the same house for over a year(%)	83.97	74.84
population who moved within CA last year(%)	12.76	20.31
population who moved from other states to CA last year(%)	1.76	2.87
population who moved from abroad last year(%)	0.64	0.94

Source: 2021 1-Year American Community Survey

Coastal Communities Market · Asking Rents · Rent Growth · Orange County, 2013-2025

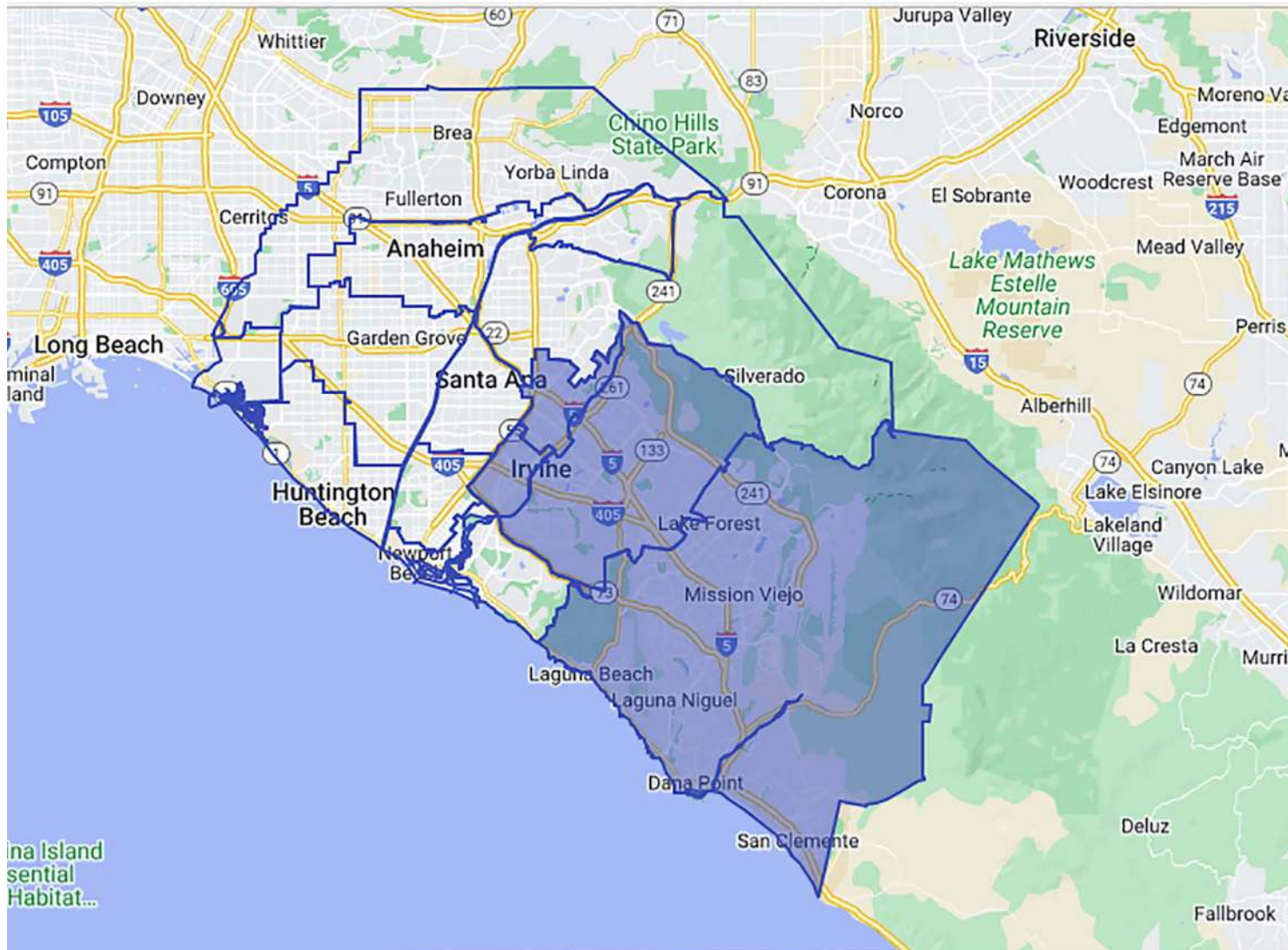


Coastal Communities Vacancy · Delivered Units · Orange County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Irvine/Tustin/Mission Viejo

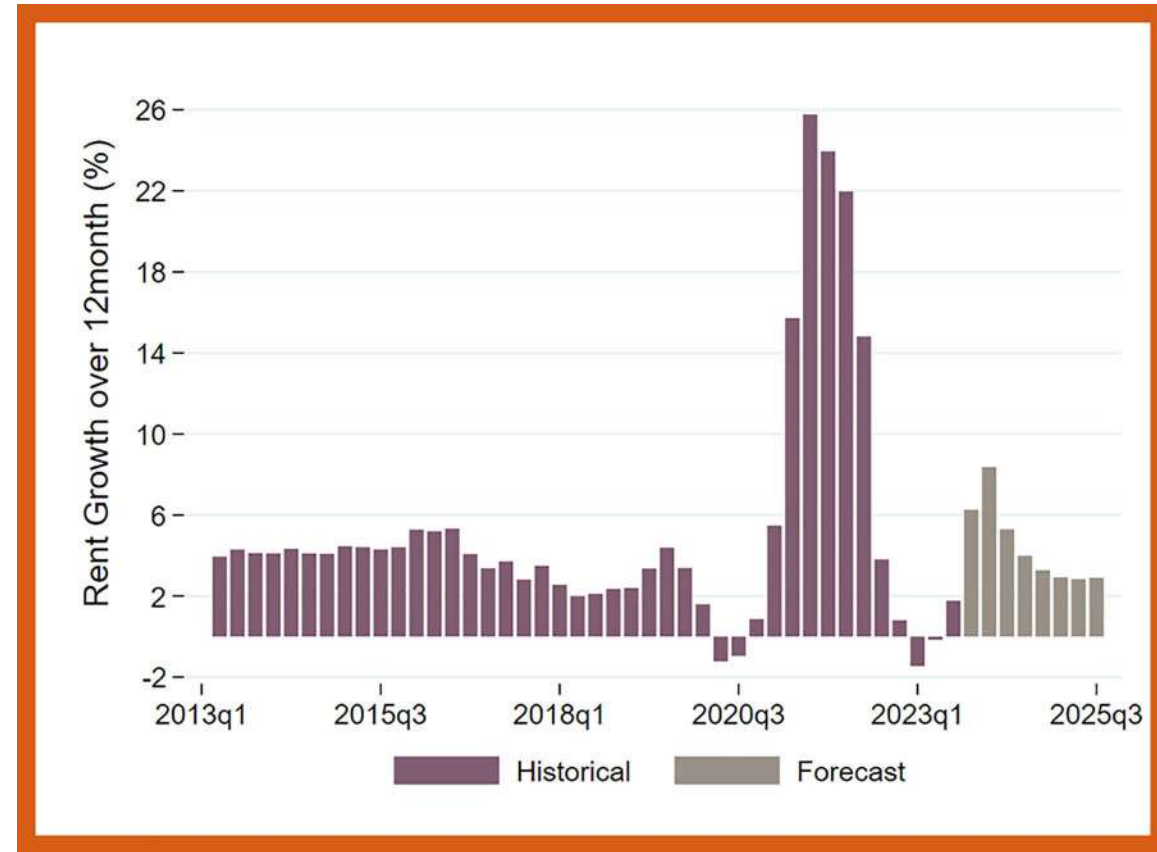
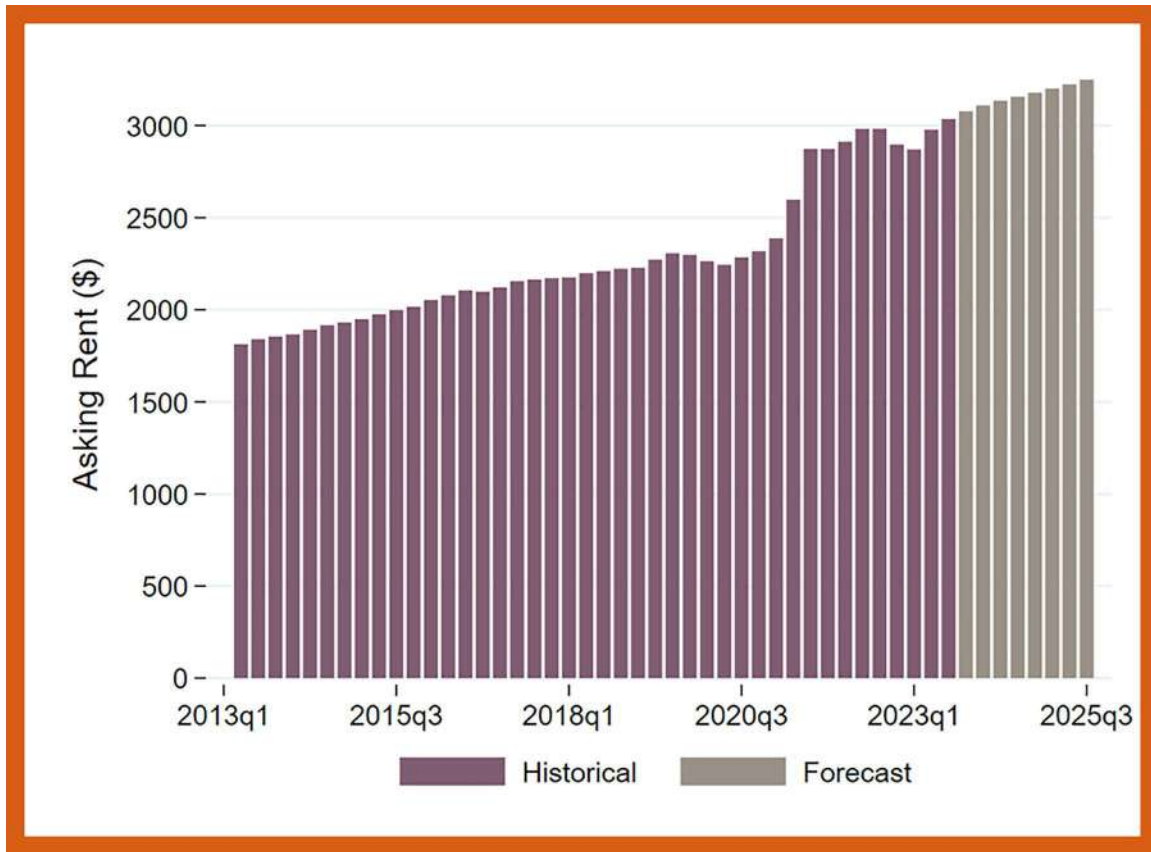


IRVINE-TUSTIN-MISSION VIEJO

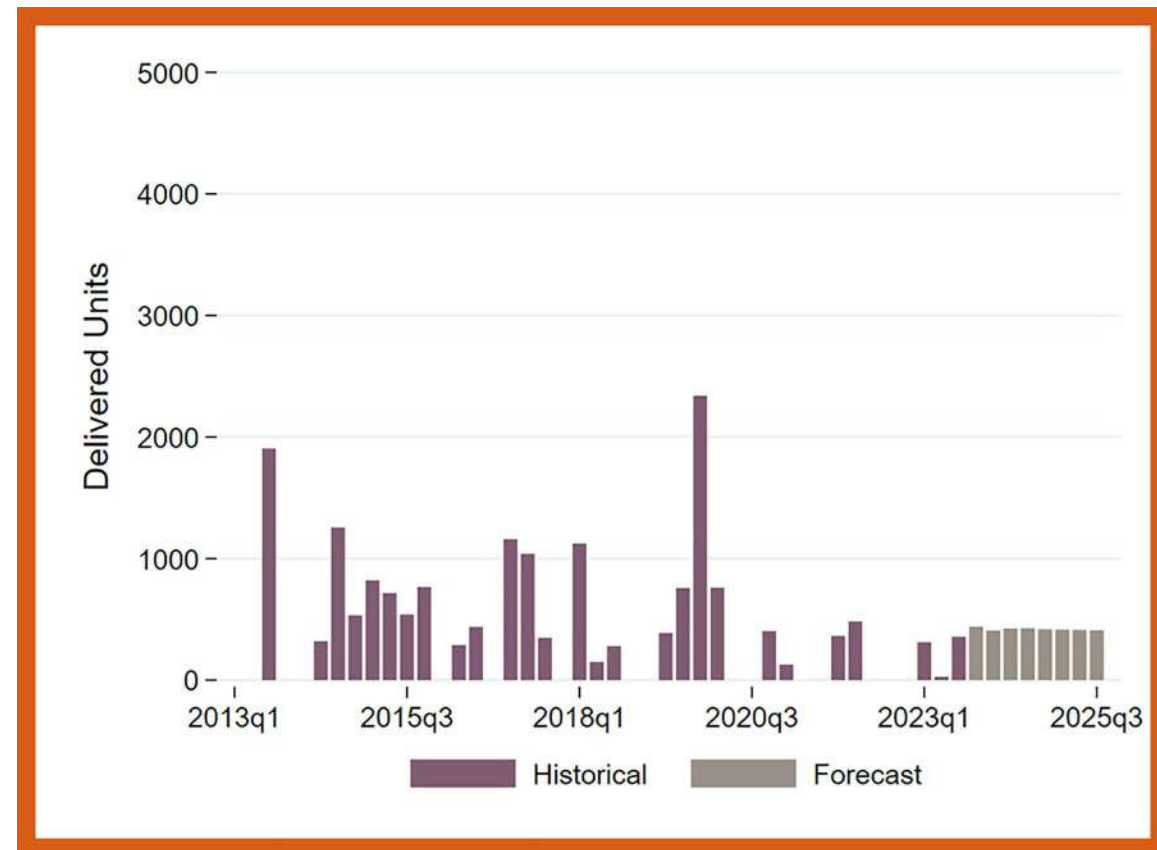
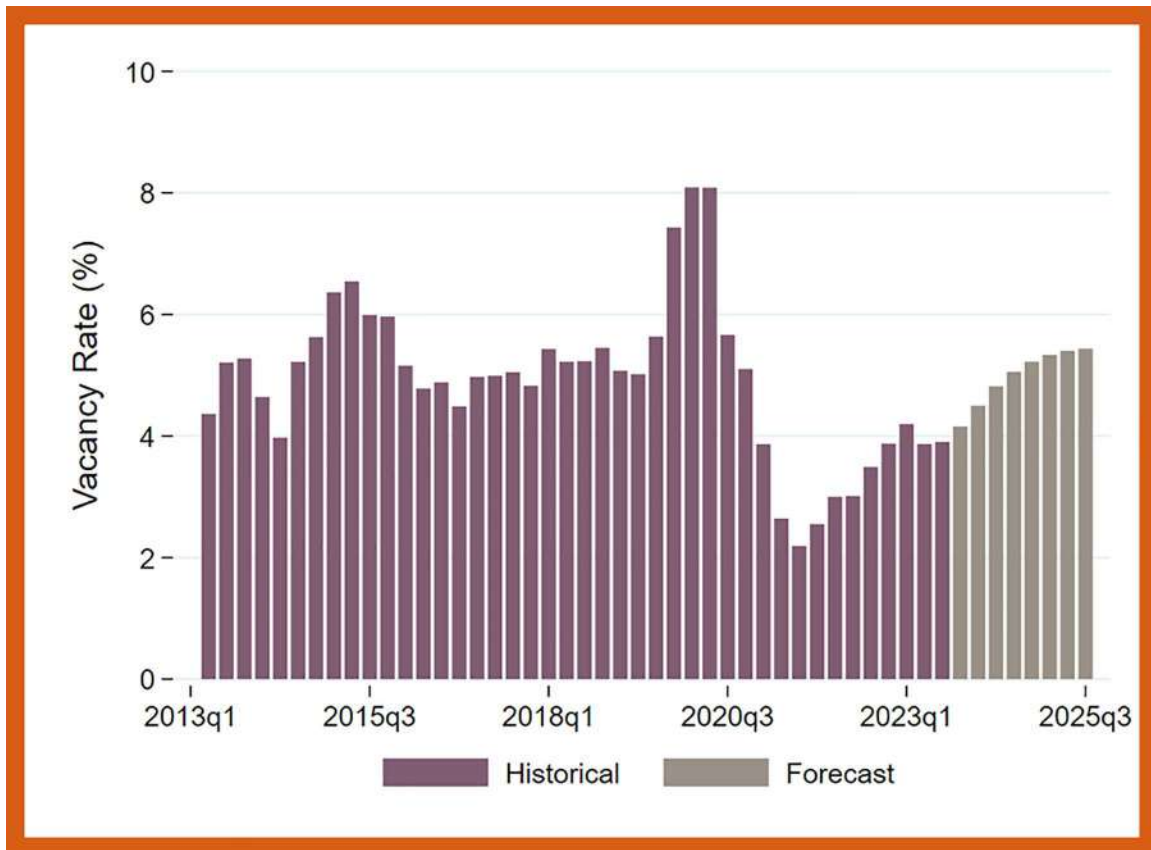
	ALL	RENTERS
RACE		
white only(%)	54.20	47.38
black only(%)	1.83	3.32
asian only(%)	21.48	17.93
hispanic(%)	16.45	25.68
other race(%)	6.05	5.69
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	3.73	6.17
highschool diploma, 18 yrs or more(%)	10.84	12.59
some college education, 18 yrs or more(%)	21.49	22.11
bachelors degree, 18 yrs or more(%)	25.70	23.43
more than bachelors degree, 18 yrs or more(%)	17.02	13.63
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		31.21
renter households living in 2-4 unit housing(%)		14.30
renter households living in 5-9 unit housing(%)		10.06
renter households living in 10-19 unit housing(%)		7.82
renter households living in 20+ unit housing(%)		36.07
renter households living in other types of housing(%)		0.54
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		10.82
renter households living in a structure built between 1970 and 1999(%)		54.43
renter households living in a structure built between 2000 and 2009(%)		17.21
renter households living in a structure built between 2010 and 2019(%)		15.68
renter households living in a structure built in 2020 and 2021(%)		1.85
HOUSEHOLD STATISTICS		
share of renter households(%)	39.26	
share of renter households living in multifamily structure(%)		53.95
share of rent-burdened households(%)		52.26
share of households with children(%)	41.91	36.00
average household size	2.69	2.48
median household income	\$119,781	\$83,424
MIGRATION STATISTICS		
population living in the same house for over a year(%)	81.36	68.54
population who moved within CA last year(%)	13.58	22.99
population who moved from other states to CA last year(%)	2.49	4.70
population who moved from abroad last year(%)	1.42	2.29

Source: 2021 1-Year American Community Survey

Irvine/Tustin/Mission Viejo Market · Asking Rents · Rent Growth · Orange County, 2013-2025

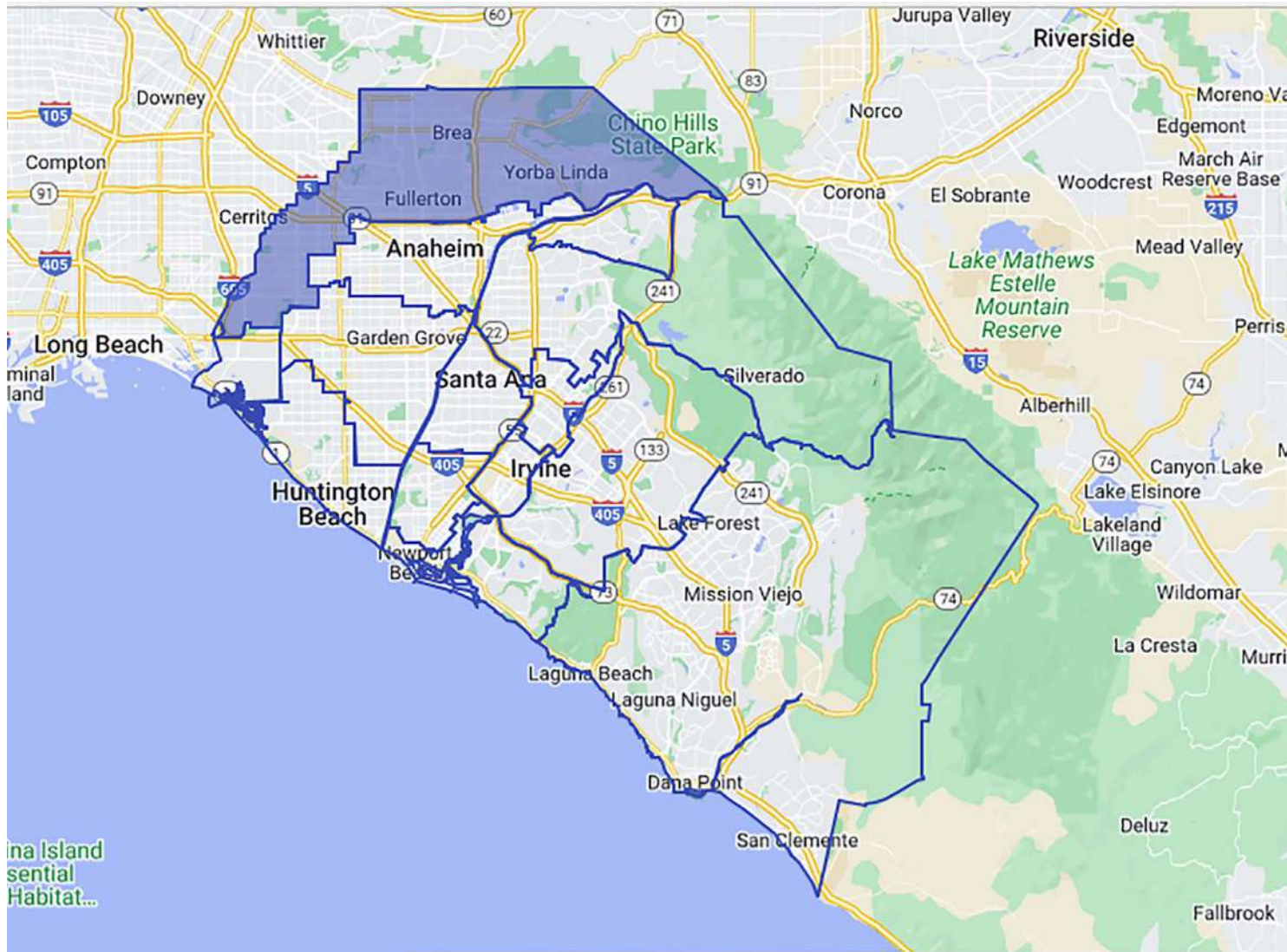


Irvine/Tustin/Mission Viejo Vacancy · Delivered Units · Orange County, 2013-2025



Source: USC Casden forecasts based on CoStar data

North County



NORTH COUNTY

RACE

	ALL	RENTERS
white only(%)	33.47	21.49
black only(%)	2.09	2.77
asian only(%)	23.97	16.61
hispanic(%)	35.91	54.68
other race(%)	4.56	4.47

EDUCATION

less than highschool diploma, 18 yrs or more(%)	7.50	11.62
highschool diploma, 18 yrs or more(%)	14.26	16.49
some college education, 18 yrs or more(%)	25.11	25.51
bachelors degree, 18 yrs or more(%)	19.89	15.08
more than bachelors degree, 18 yrs or more(%)	11.91	6.29

RENTAL UNITS BY SIZE OF STRUCTURE

renter households living in single-family housing(%)		30.21
renter households living in 2-4 unit housing(%)		16.53
renter households living in 5-9 unit housing(%)		10.81
renter households living in 10-19 unit housing(%)		9.23
renter households living in 20+ unit housing(%)		32.53
renter households living in other types of housing(%)		0.69

RENTAL UNITS BY AGE OF STRUCTURE

renter households living in a structure built before 1970(%)		34.57
renter households living in a structure built between 1970 and 1999(%)		53.15
renter households living in a structure built between 2000 and 2009(%)		8.81
renter households living in a structure built between 2010 and 2019(%)		3.08
renter households living in a structure built in 2020 and 2021(%)		0.39

HOUSEHOLD STATISTICS

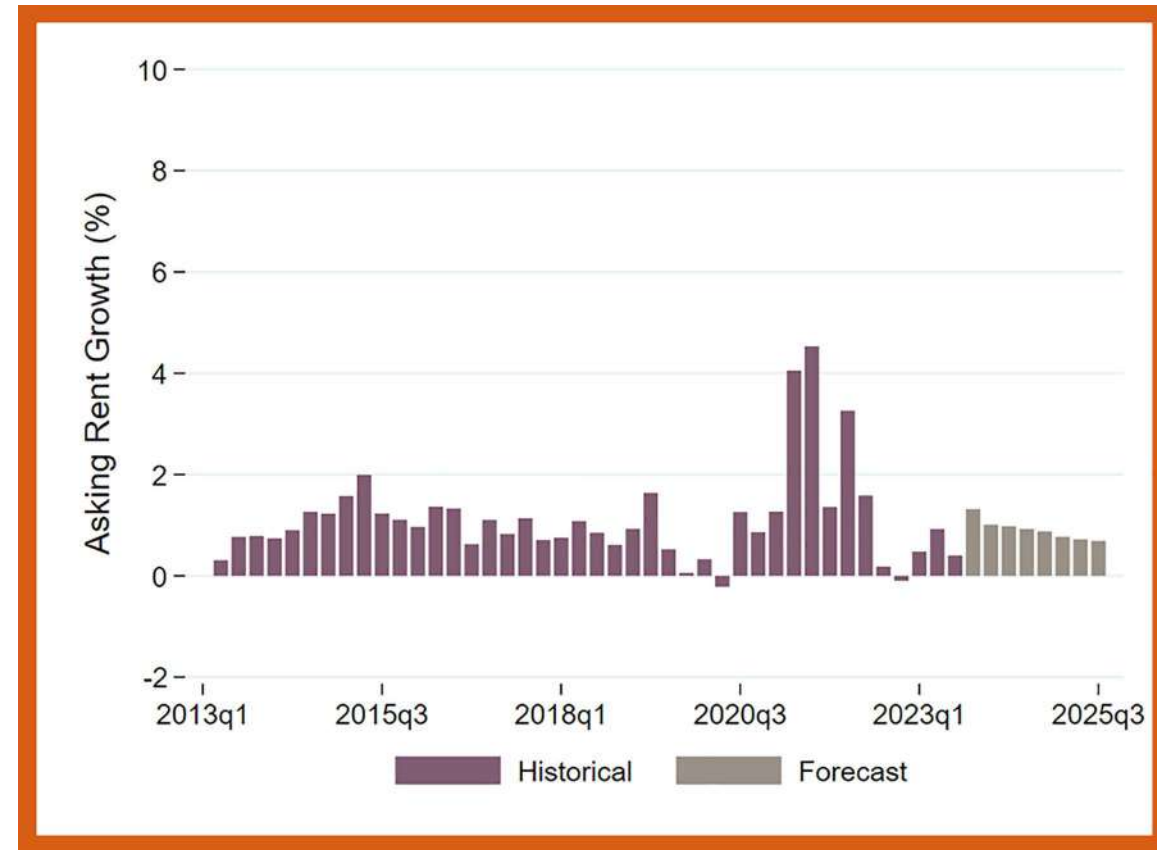
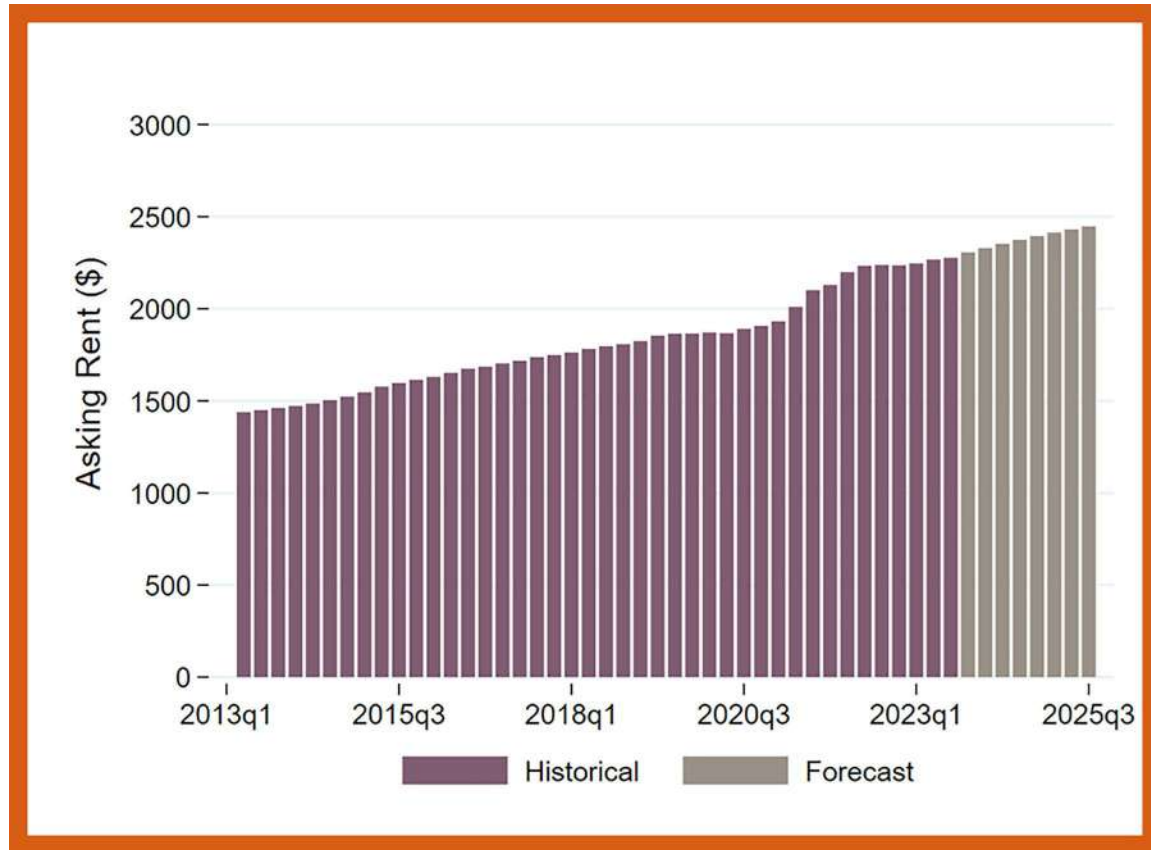
share of renter households(%)	38.63	
share of renter households living in multifamily structure(%)		52.57
share of rent-burdened households(%)		52.58
share of households with children(%)	46.60	46.44
average household size	2.95	2.92
median household income	\$99,285	\$72,095

MIGRATION STATISTICS

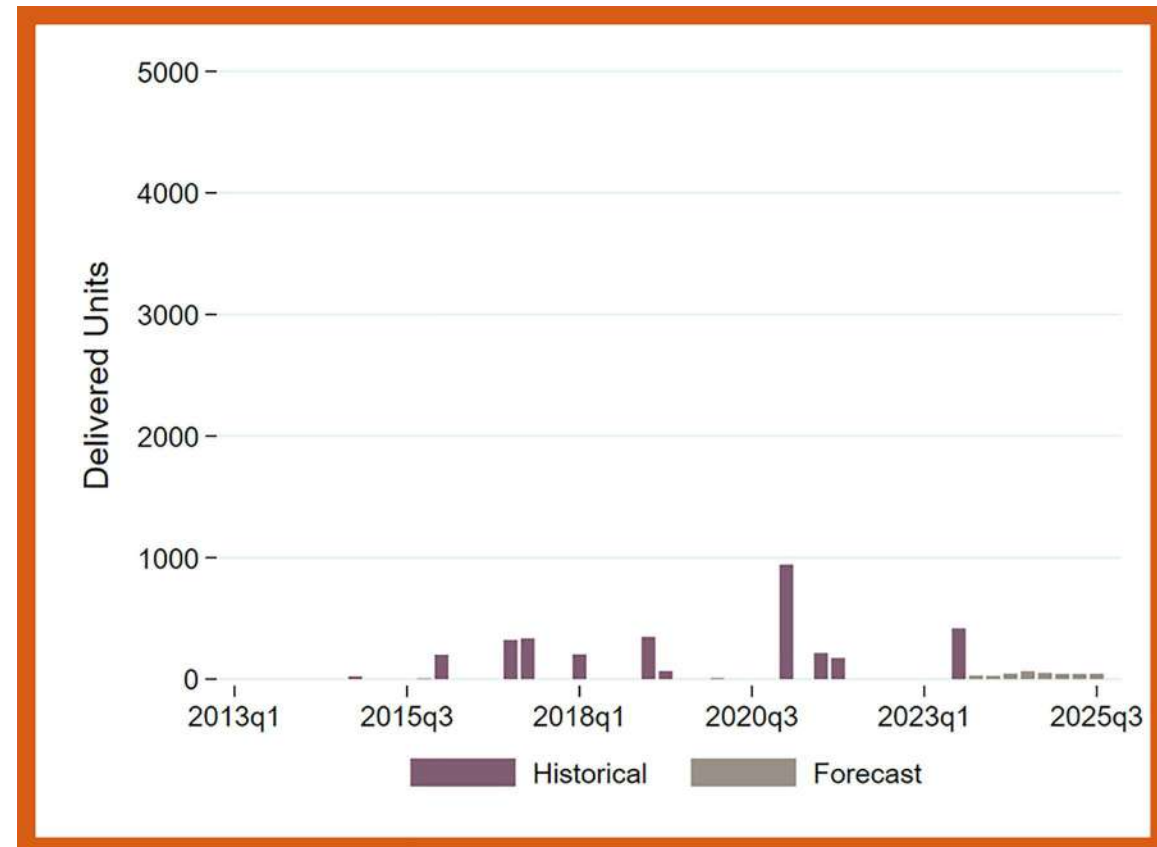
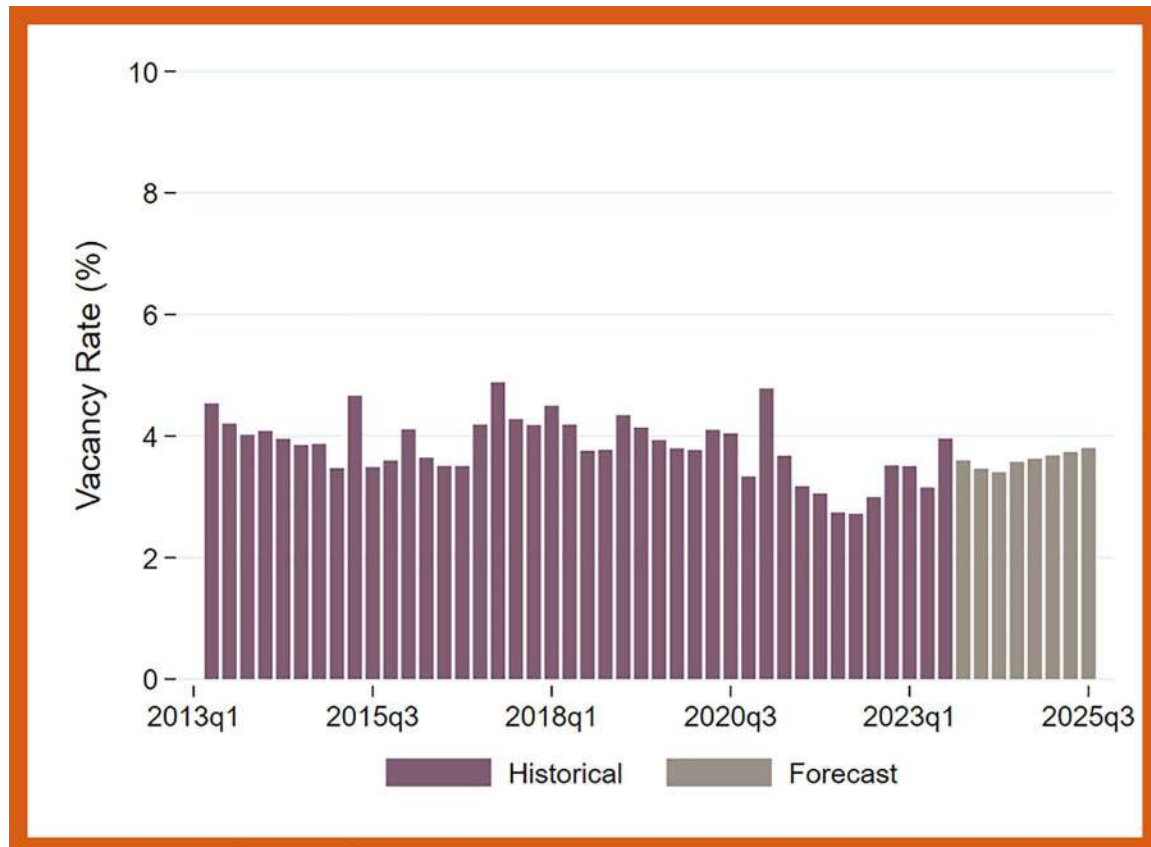
population living in the same house for over a year(%)	89.88	83.41
population who moved within CA last year(%)	8.31	14.19
population who moved from other states to CA last year(%)	0.33	0.23
population who moved from abroad last year(%)	0.45	0.62

Source: 2021 1-Year American Community Survey

North County Market · Asking Rents · Rent Growth · Orange County, 2013-2025



North County Vacancy · Delivered Units · Orange County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Inland Empire



INLAND EMPIRE

	ALL	RENTERS
RACE		
white only(%)	28.11	21.27
black only(%)	6.79	9.04
asian only(%)	7.38	4.95
hispanic(%)	53.57	60.72
other race(%)	4.15	4.01
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	12.19	13.9
highschool diploma, 18 yrs or more(%)	22.11	23.87
some college education, 18 yrs or more(%)	24.52	21.94
bachelors degree, 18 yrs or more(%)	10.59	7.12
more than bachelors degree, 18 yrs or more(%)	5.4	3.04
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		46.19
renter households living in 2-4 unit housing(%)		13.34
renter households living in 5-9 unit housing(%)		9.52
renter households living in 10-19 unit housing(%)		6.76
renter households living in 20+ unit housing(%)		19.54
renter households living in other types of housing(%)		4.66
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		22.3
renter households living in a structure built between 1970 and 1999(%)		53.51
renter households living in a structure built between 2000 and 2009(%)		16.3
renter households living in a structure built between 2010 and 2019(%)		7.5
renter households living in a structure built in 2020 and 2021(%)		0.39
HOUSEHOLD STATISTICS		
share of renter households(%)	34.64	
share of renter households living in multifamily structure(%)		35.81
share of rent-burdened households(%)		53.84
share of households with children(%)	50.3	50.98
average household size	3.23	3.05
median household income	\$77,245	\$54,380
MIGRATION STATISTICS		
population living in the same house for over a year(%)	89.28	85.99
population who moved within CA last year(%)	8.54	11.31
population who moved from other states to CA last year(%)	0.88	1.17
population who moved from abroad last year(%)	0.2	0.15

Source: 2021 1-Year American Community Survey

The Inland Empire

As the logistics and distribution hub of Southern California, the Inland Empire has experienced steady economic growth propelled by the skyrocketing surge in e-commerce during the pandemic and the expansion of its industrial real estate sector. As the region reopened, the Inland Empire's economy reached new heights. The Inland Empire has excellent infrastructure with major freeways, good rail connections, and two international airports with large cargo capacity, Ontario International Airport and San Bernardino International Airport. It is also close to the ports of Los Angeles and Long Beach, two of the largest ports in the country. Due to the size and strength of its economy, the Inland Empire remains an employment powerhouse for Southern California. The Inland Empire will continue to experience strong economic growth as a result of deglobalization and onshoring. It will also benefit from the new wave of business relocations to Mexico to serve the U.S. market.

The surge in logistics and jobs in the Ontario-San Bernardino-Riverside metropolitan area explains why the population has been growing in the Inland Empire. Among the five counties covered in this report, the Inland Empire remains the region that has consistently gained population. Immigration has continued to outstrip outmigration, resulting in net population gains of 52,000 in 2019 and 46,000 in 2021. Most of these new residents are from more expensive neighboring counties, namely Los Angeles County, San Diego County, and Orange County. People are moving to the Inland Empire not only for jobs but also for less expensive housing.

The Inland Empire will continue to experience strong economic growth as a result of deglobalization and onshoring.

After a couple of years of above-average rent growth during the COVID-19 pandemic that reduced housing affordability, the Inland Empire's rental market has continued to cool off. Average rent leveled off at about \$2,000 during the last two quarters, which is much lower than average rent in Los Angeles County and Orange County. We forecast the Inland Empire to add about 400 units per quarter over the next two years, which will keep vacancy constant at close to 6% and only allow for low rent growth (less than 2% annually) from \$1,994 to \$2,049 in 2025Q3.

Unlike the other regions, the Inland Empire has issued more building permits during the first 9 months of this year than in the same period last year. However, the Inland Empire largely remains a single-family market, though multifamily development has substantially increased over the years. So far this year, the county has issued 50% more permits for single-family units than multifamily (9,494 vs. 6,211). Noticeably, single-family development is down by 11% this year, whereas multifamily development is up by 85%. To put it in context, the Inland Empire

issued more than half as many multifamily permits as Los Angeles County for a renter population that is 3.2 times smaller - 4.1 multifamily permits per thousand vs. 2.3 permits per thousand in Los Angeles County. Given its strong economy and more affordable housing, the Inland Empire will remain an attractive destination.

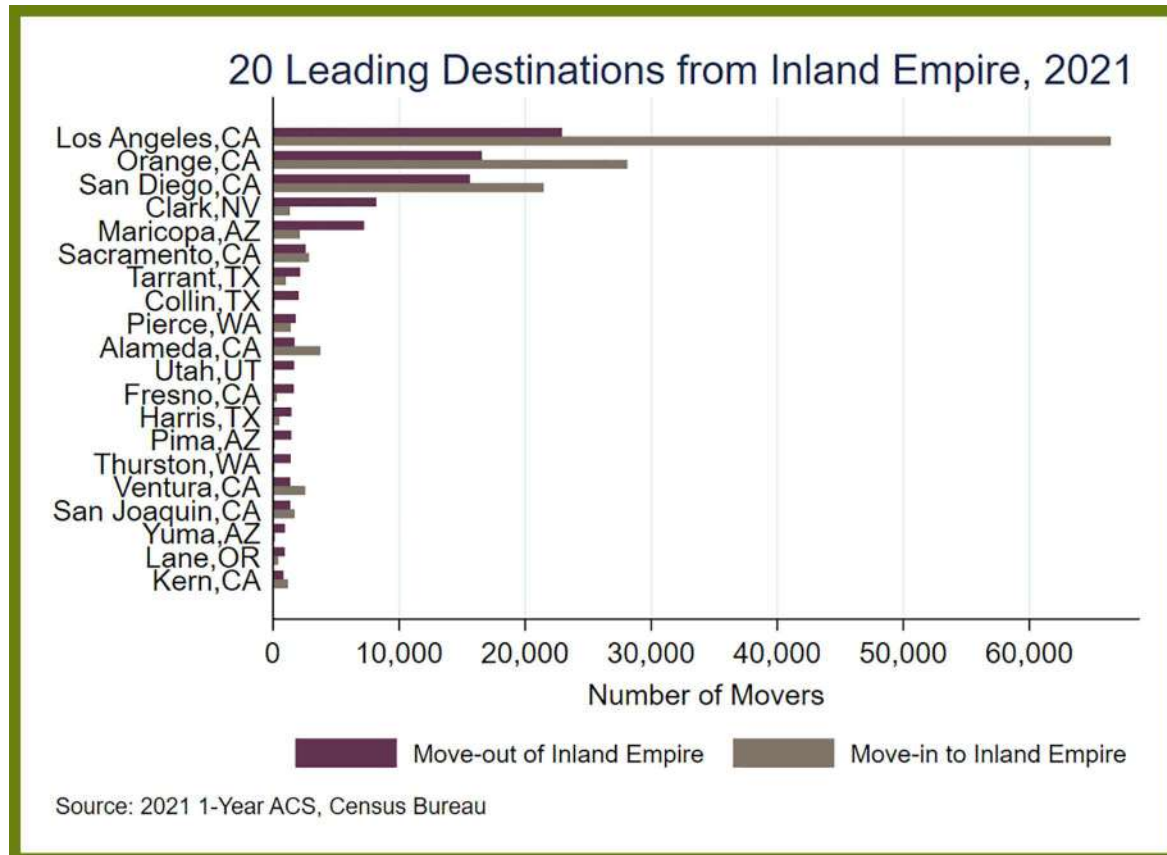
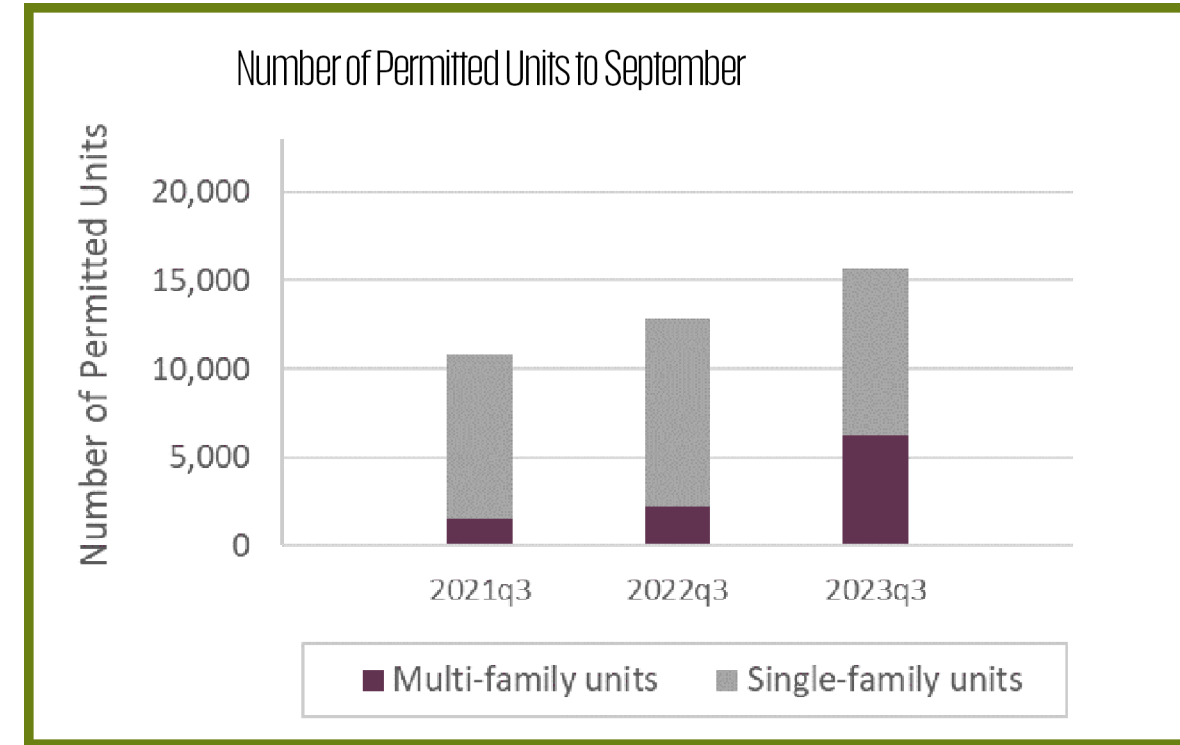
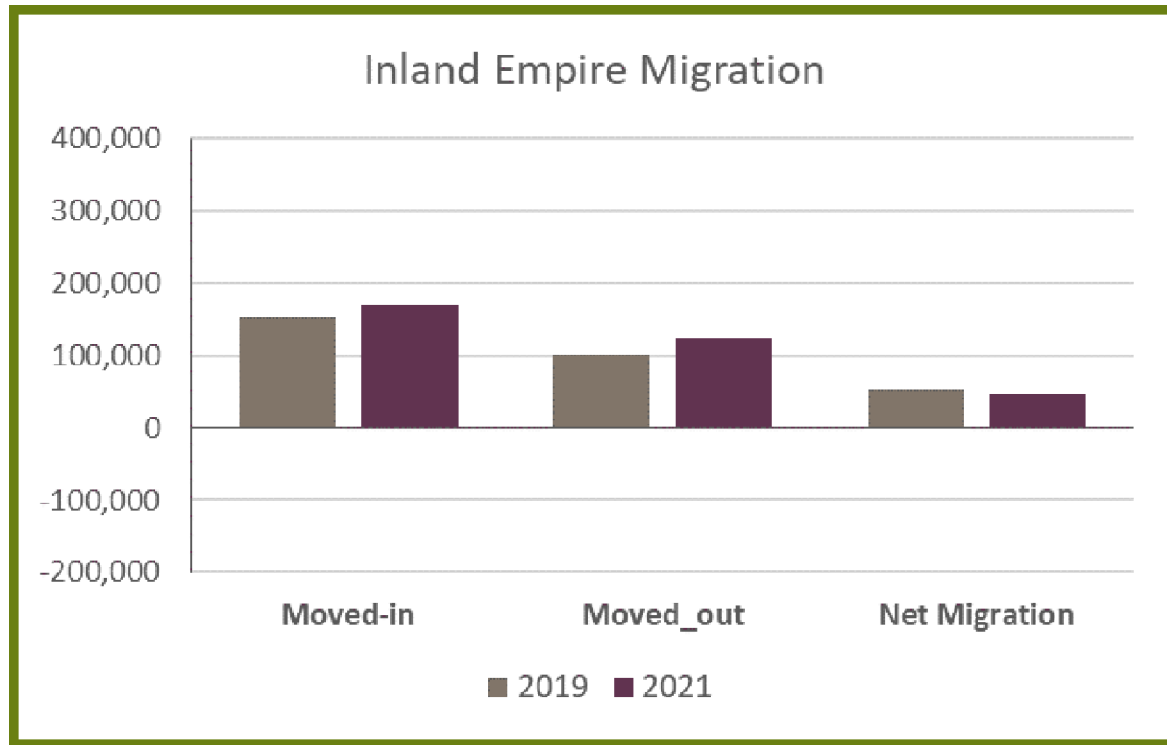
EMPLOYMENT LOCATION QUOTIENTS, 2023 1ST QUARTER

INDUSTRY • INLAND EMPIRE

All industries	0.99
Goods-producing	0.94
Natural resources and mining	0.76
Construction	1.36
Manufacturing	0.72
Service-providing	1.01
Trade, transportation, and utilities	1.48
Information	0.39
Financial activities	0.49
Professional and business services	0.67
Education and health services	1.01
Leisure and hospitality	1.11
Other services	0.92
Unclassified	0.39

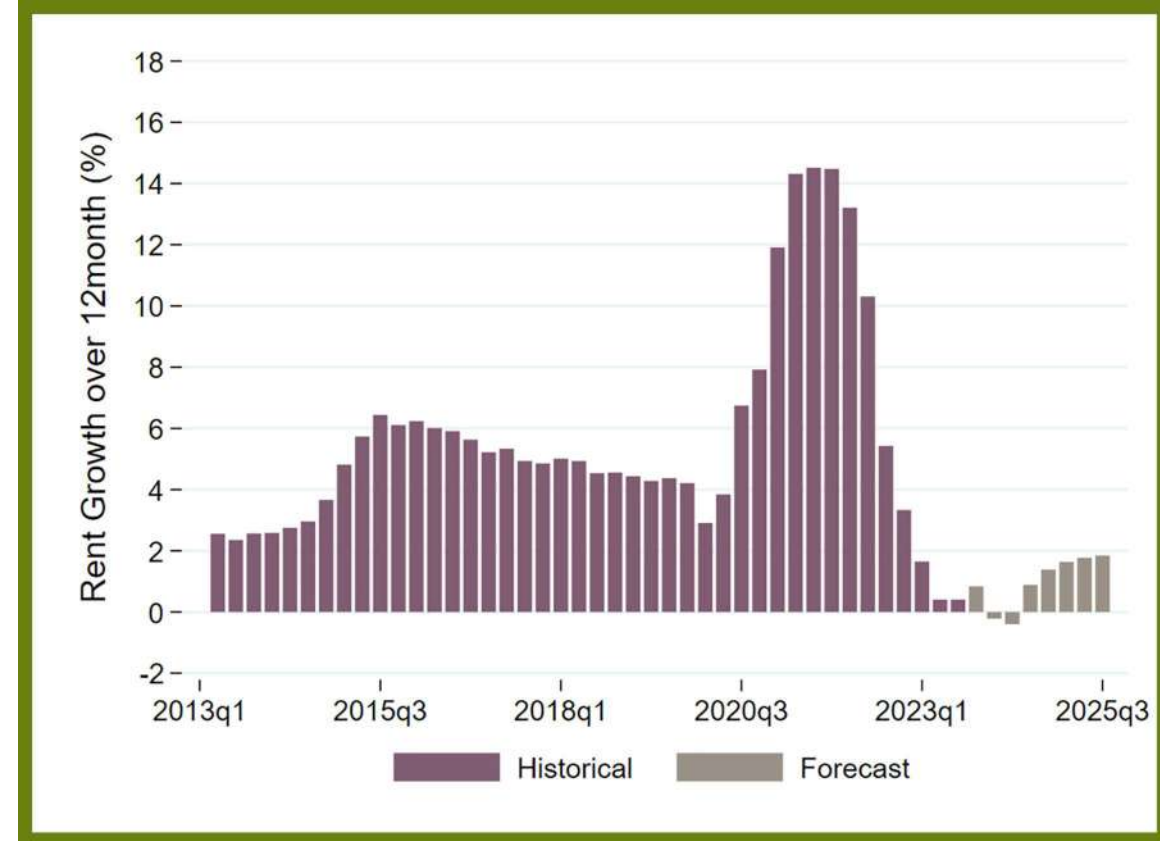
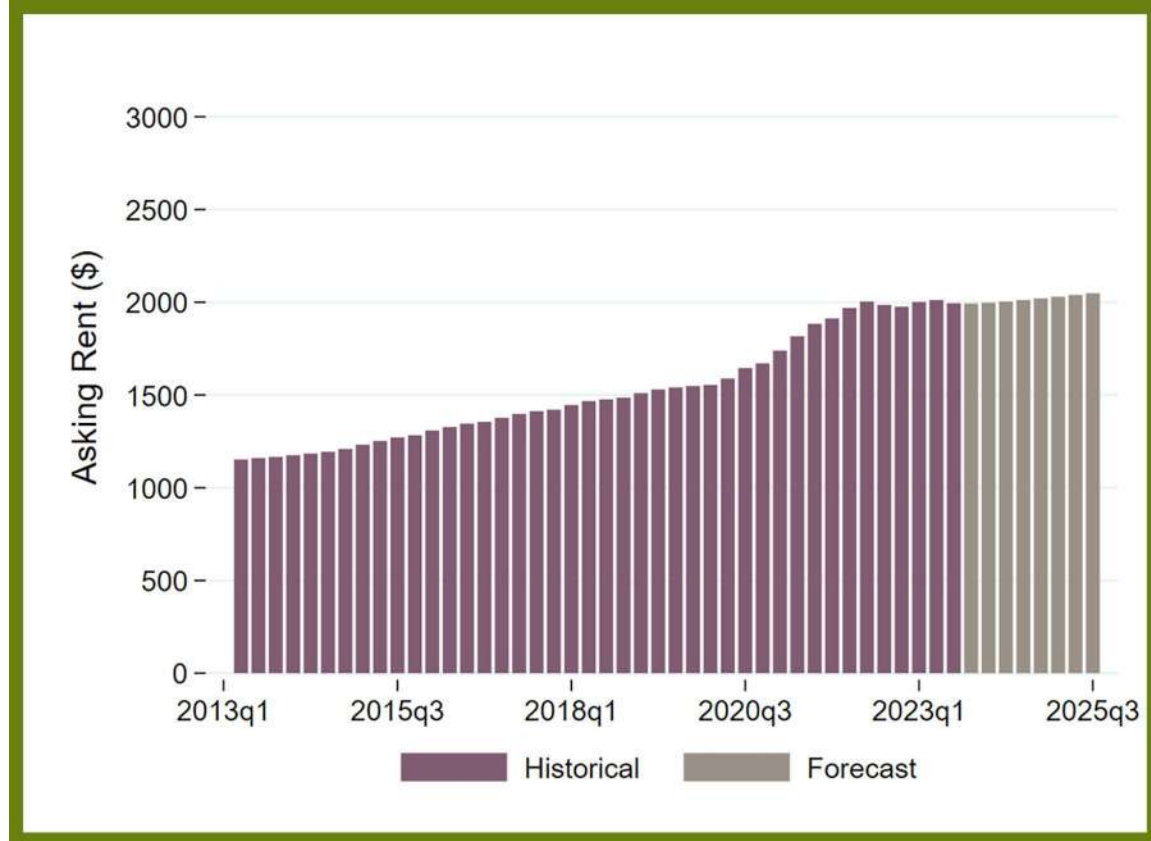
Source: U.S. Bureau of Labor Statistics

Migration - Inland Empire, 2019 & 2021

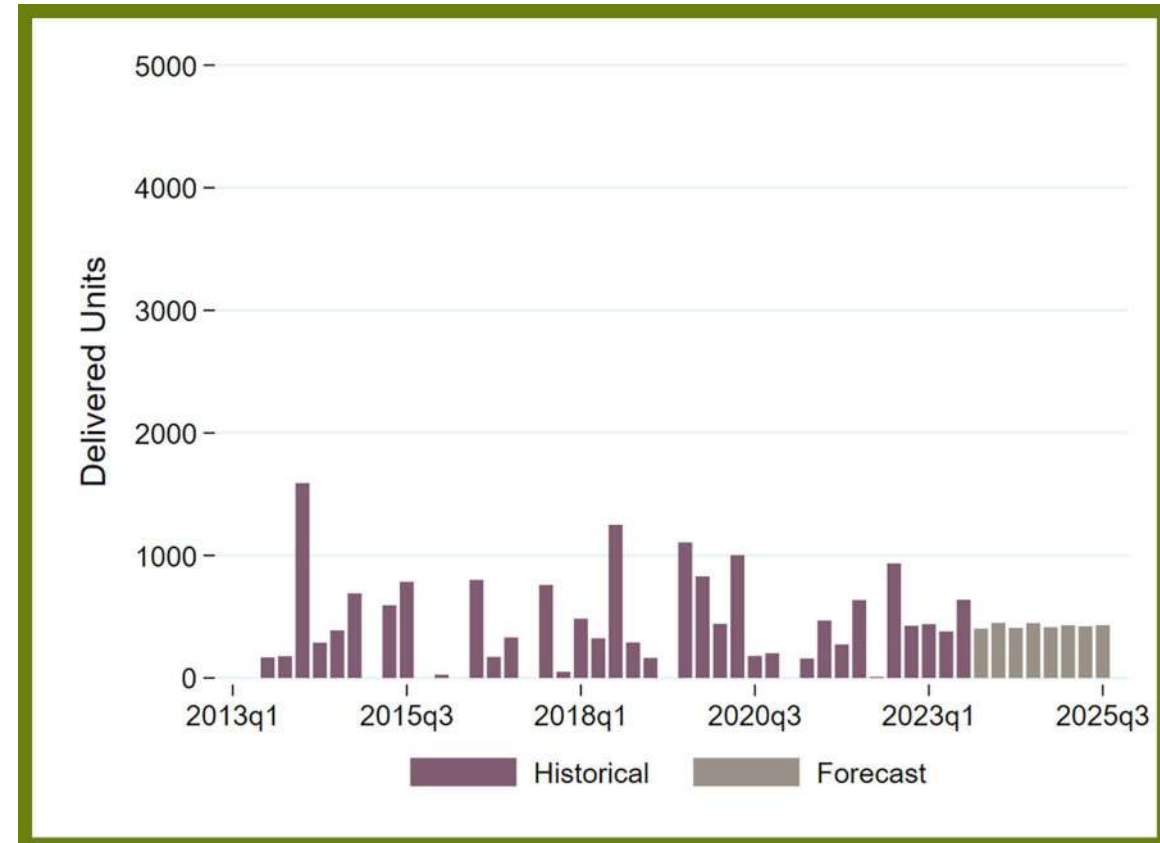
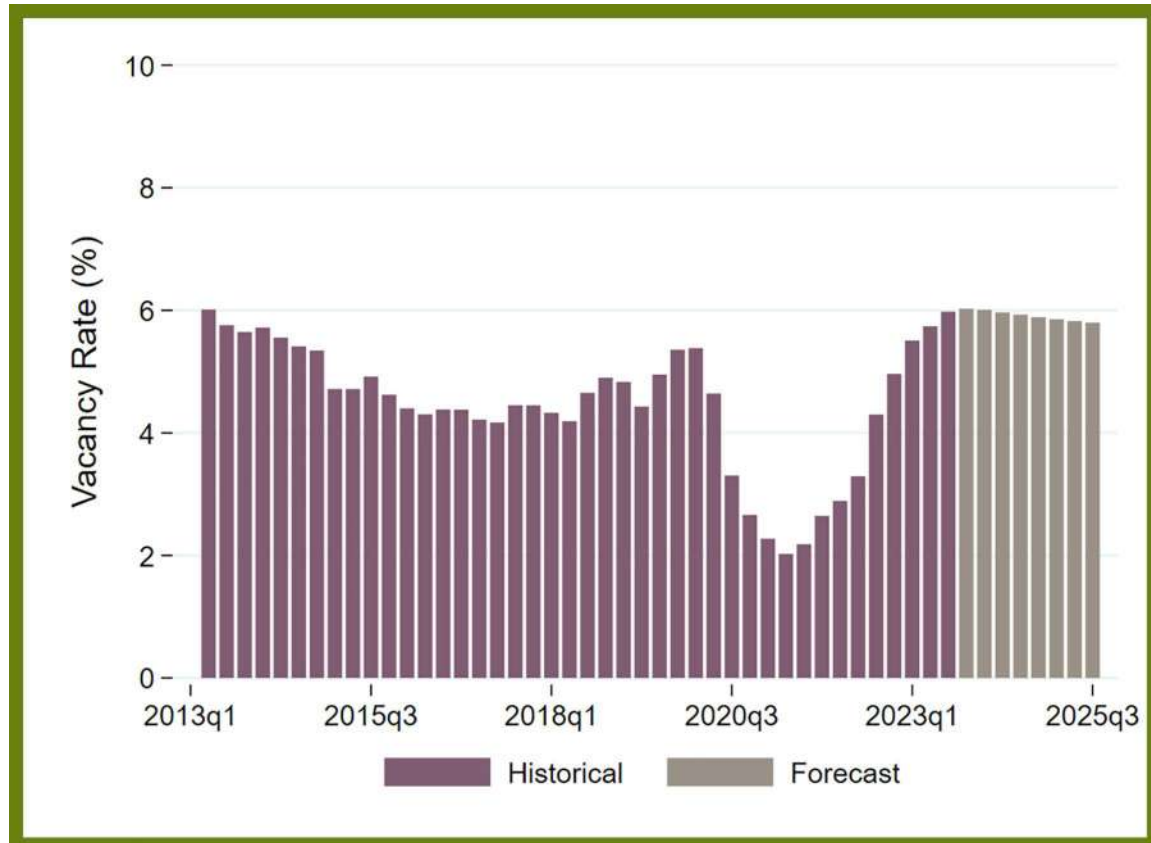


Source: 2021 1-Year American Community Survey

Inland Empire · Asking Rents · Rent Growth · Inland Empire, 2013-2025

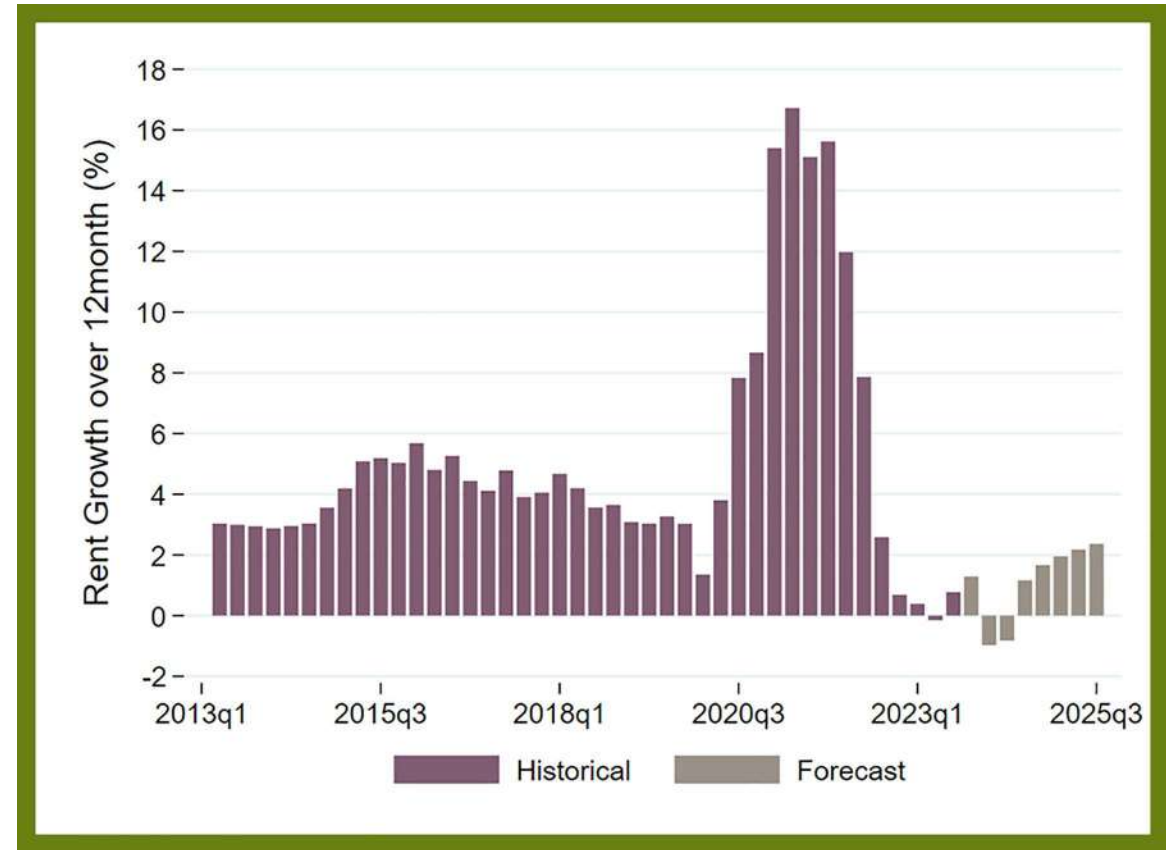
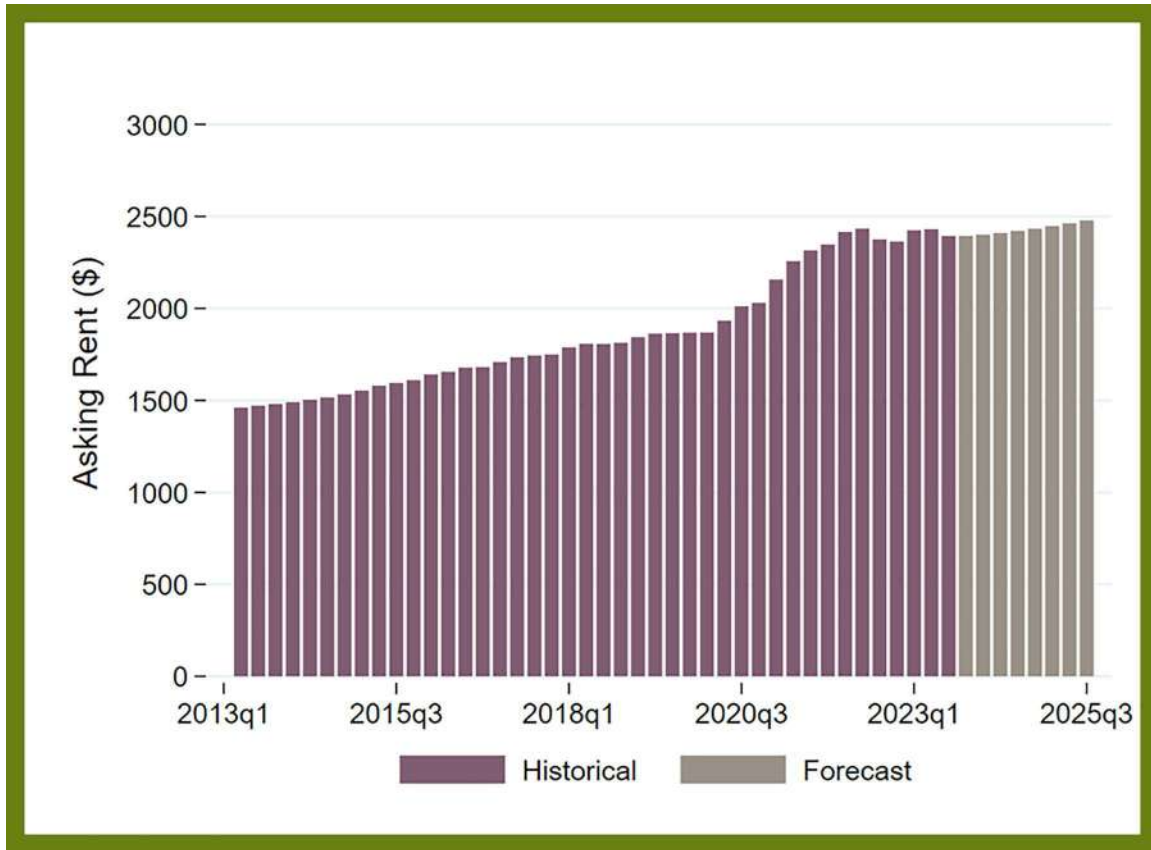


Inland Empire Vacancy · Delivered Units · Inland Empire, 2013-2025

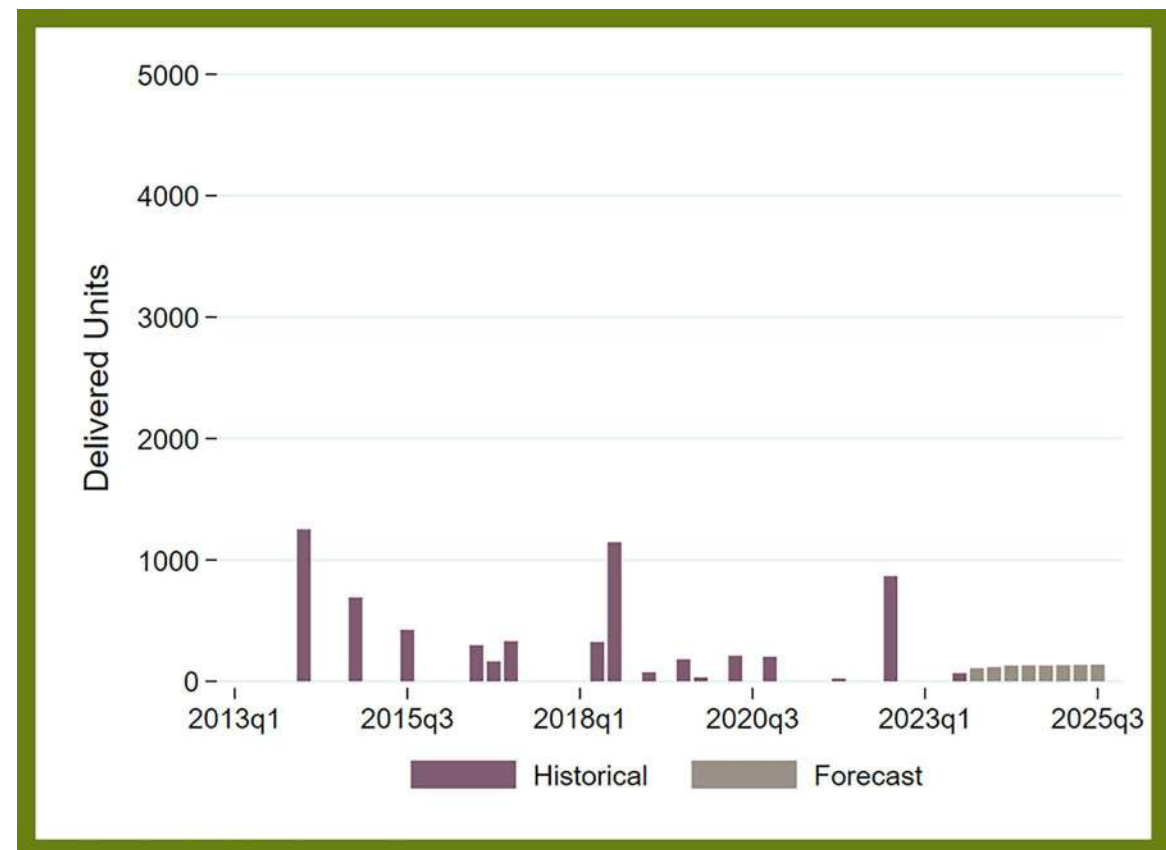
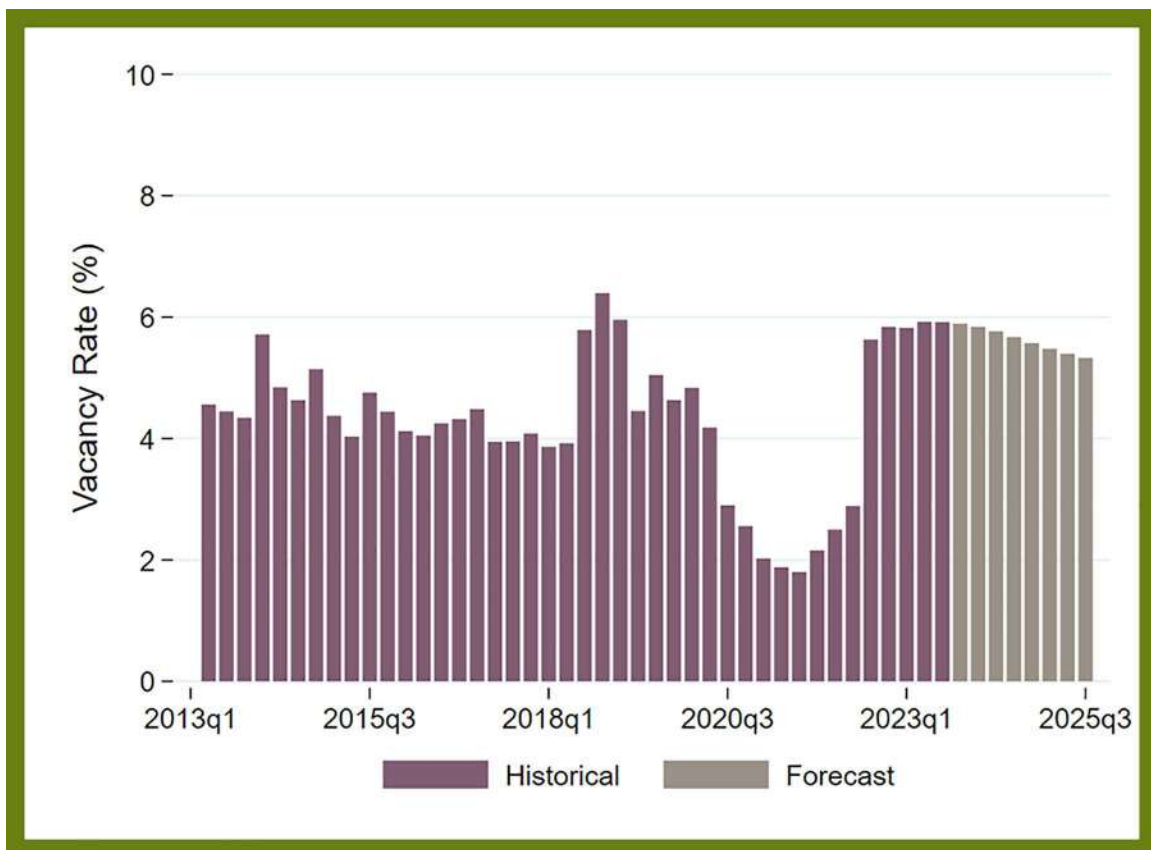


Source: USC Casden forecasts based on CoStar data

Chino-Rancho Cucamonga · Asking Rents · Rent Growth · Inland Empire, 2013-2025

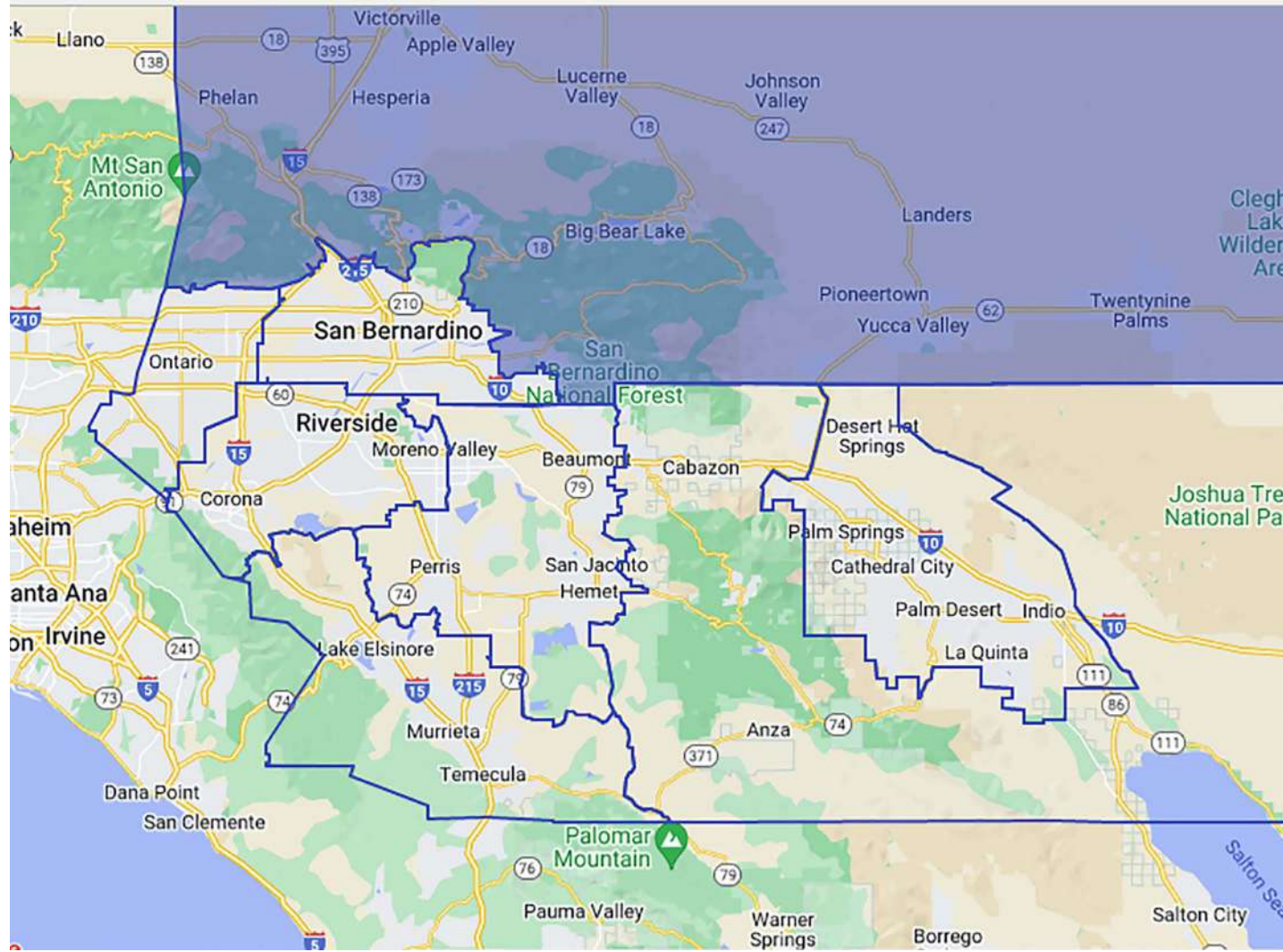


Inland Empire Vacancy · Delivered Units · Inland Empire, 2013-2025



Source: USC Casden forecasts based on CoStar data

Outlying San Bernardino

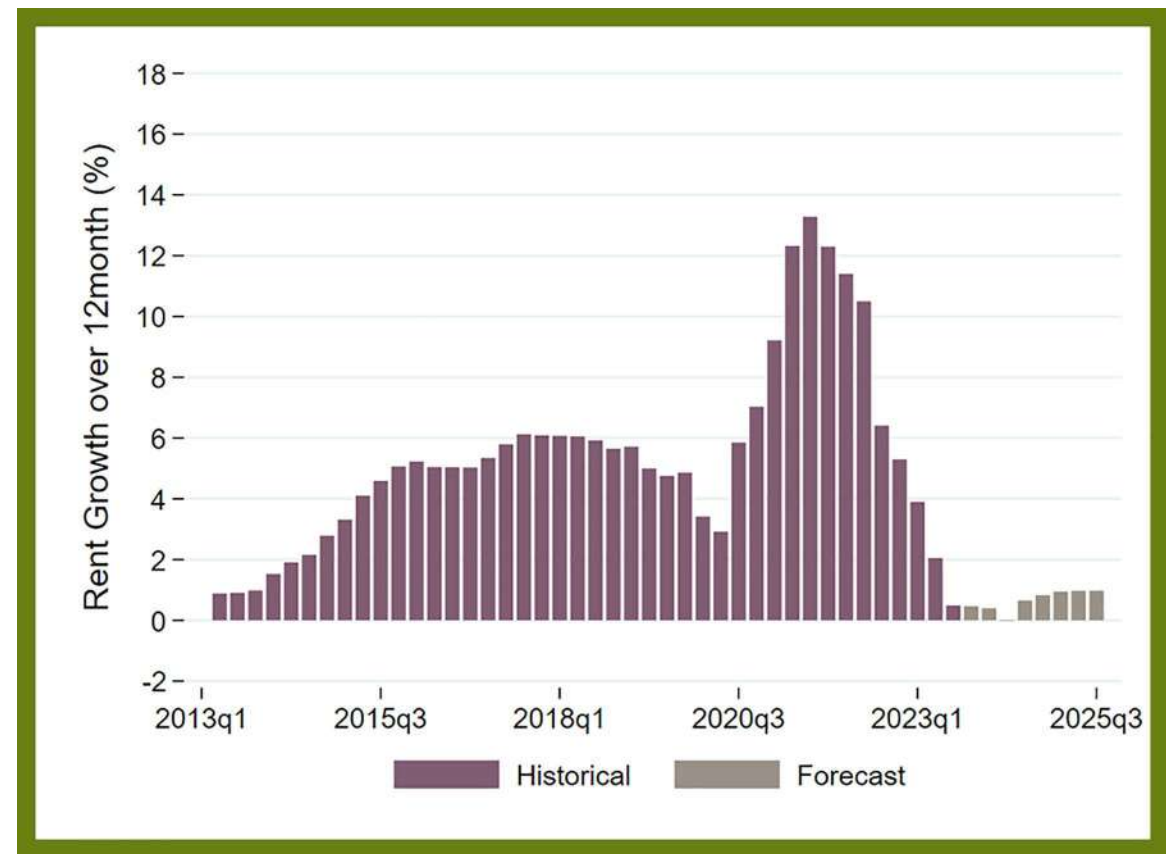
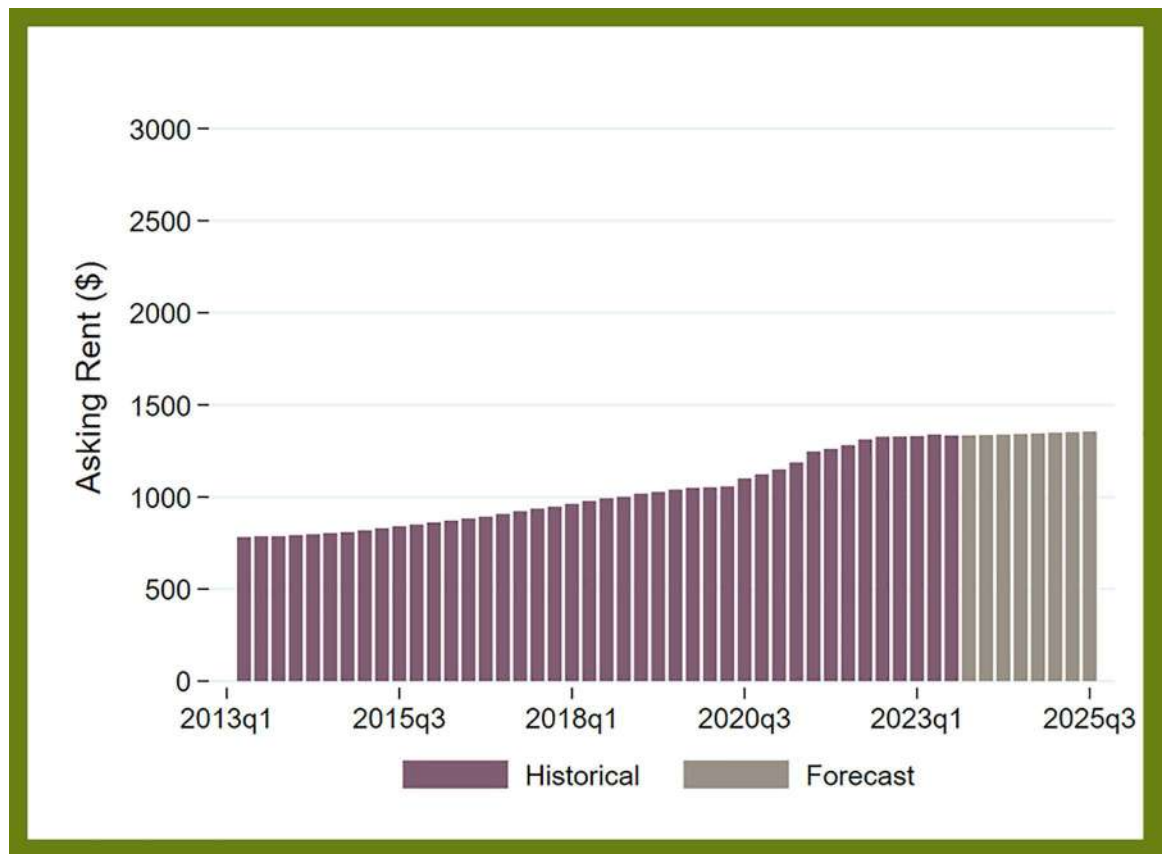


OUTLYING SAN BERNARDINO

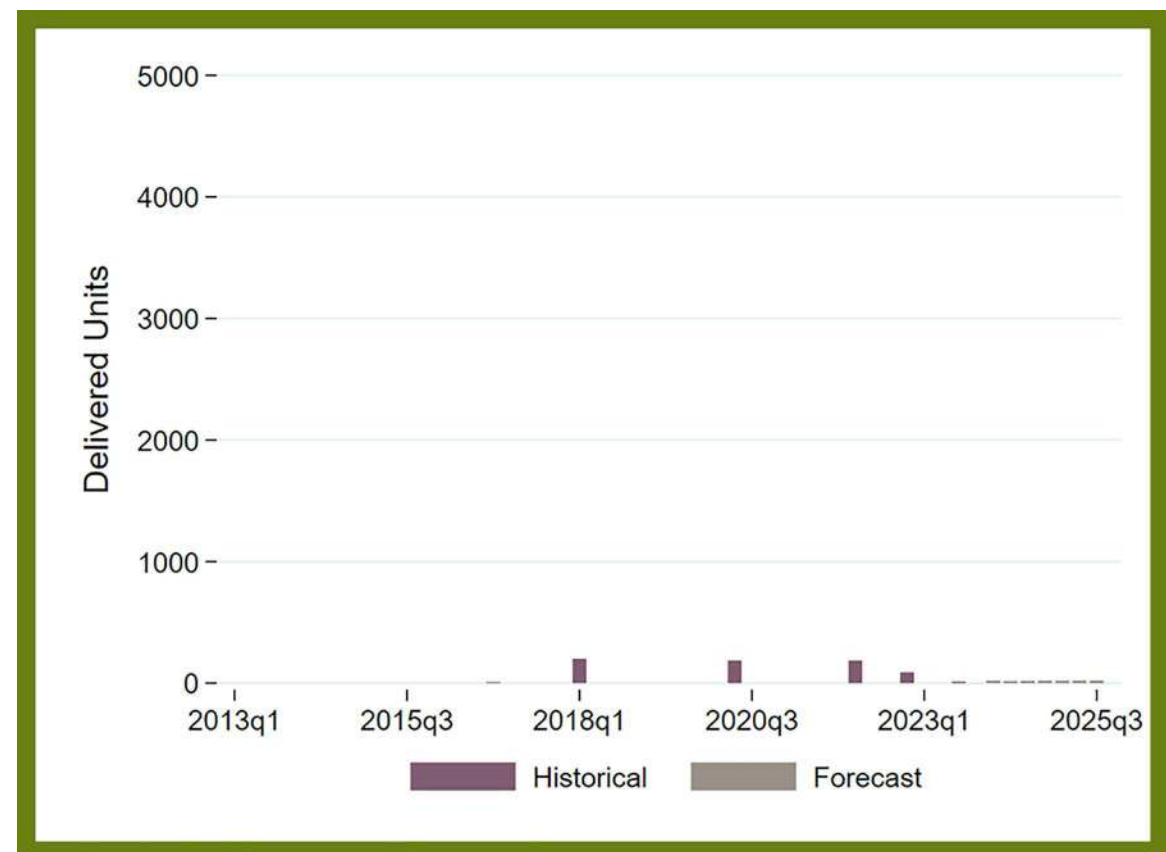
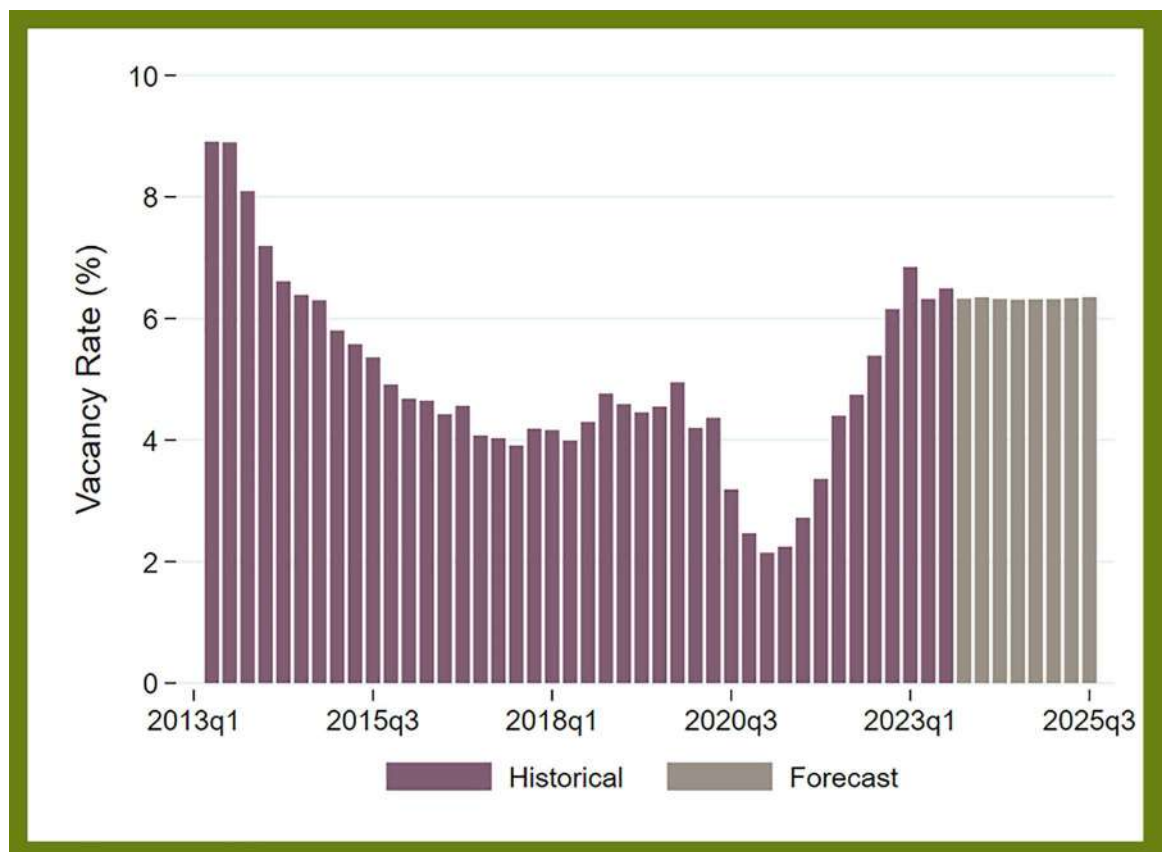
	ALL	RENTERS
RACE		
white only(%)	37.59	30.56
black only(%)	7.20	10.74
asian only(%)	3.30	3.12
hispanic(%)	46.97	49.74
other race(%)	4.94	5.83
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	11.77	11.46
highschool diploma, 18 yrs or more(%)	22.76	22.71
some college education, 18 yrs or more(%)	26.64	24.92
bachelors degree, 18 yrs or more(%)	7.90	5.45
more than bachelors degree, 18 yrs or more(%)	3.94	2.31
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		60.29
renter households living in 2-4 unit housing(%)		16.17
renter households living in 5-9 unit housing(%)		6.34
renter households living in 10-19 unit housing(%)		4.06
renter households living in 20+ unit housing(%)		7.30
renter households living in other types of housing(%)		5.84
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		17.49
renter households living in a structure built between 1970 and 1999(%)		61.14
renter households living in a structure built between 2000 and 2009(%)		17.12
renter households living in a structure built between 2010 and 2019(%)		4.01
renter households living in a structure built in 2020 and 2021(%)		0.24
HOUSEHOLD STATISTICS		
share of renter households(%)	34.16	
share of renter households living in multifamily structure(%)		17.70
share of rent-burdened households(%)		51.98
share of households with children(%)	47.66	50.49
average household size	3.13	3.03
median household income	\$65,709	\$46,347
MIGRATION STATISTICS		
population living in the same house for over a year(%)	86.97	82.26
population who moved within CA last year(%)	9.70	12.85
population who moved from other states to CA last year(%)	1.74	3.09
population who moved from abroad last year(%)	0.20	0.27

Source: 2021 1-Year American Community Survey

Outlying San Bernardino · Asking Rents · Rent Growth · Inland Empire, 2013-2025

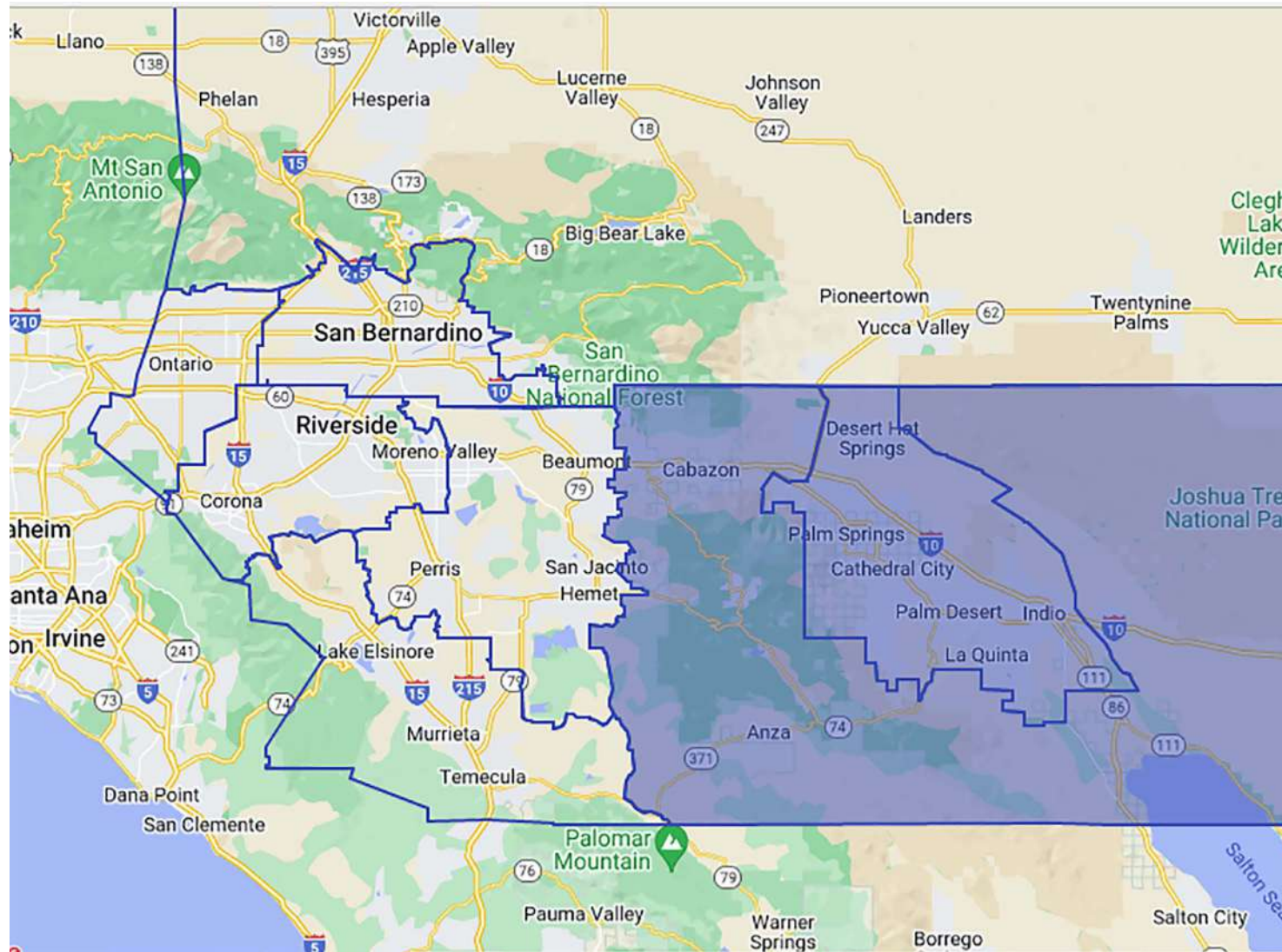


Outlying San Bernardino Vacancy · Delivered Units · Inland Empire, 2013-2025



Source: USC Casden forecasts based on CoStar data

Palm Springs-Indio

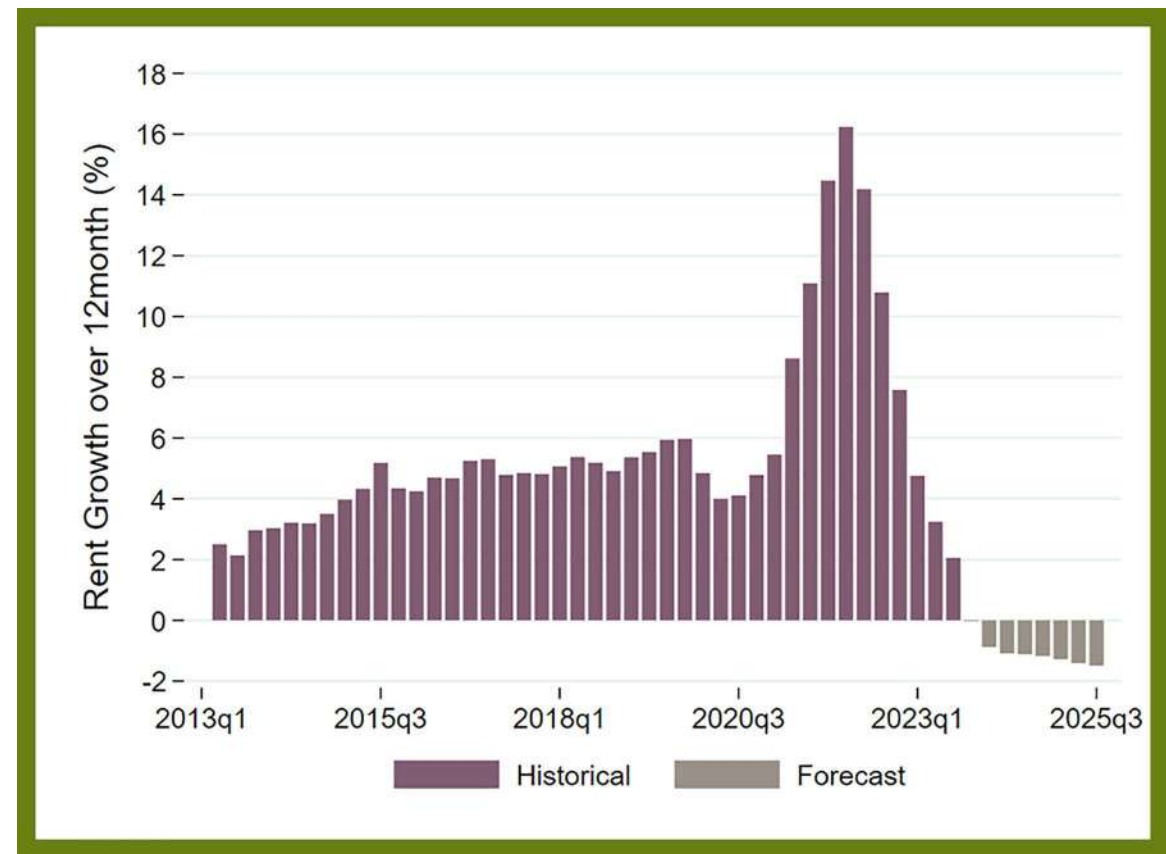
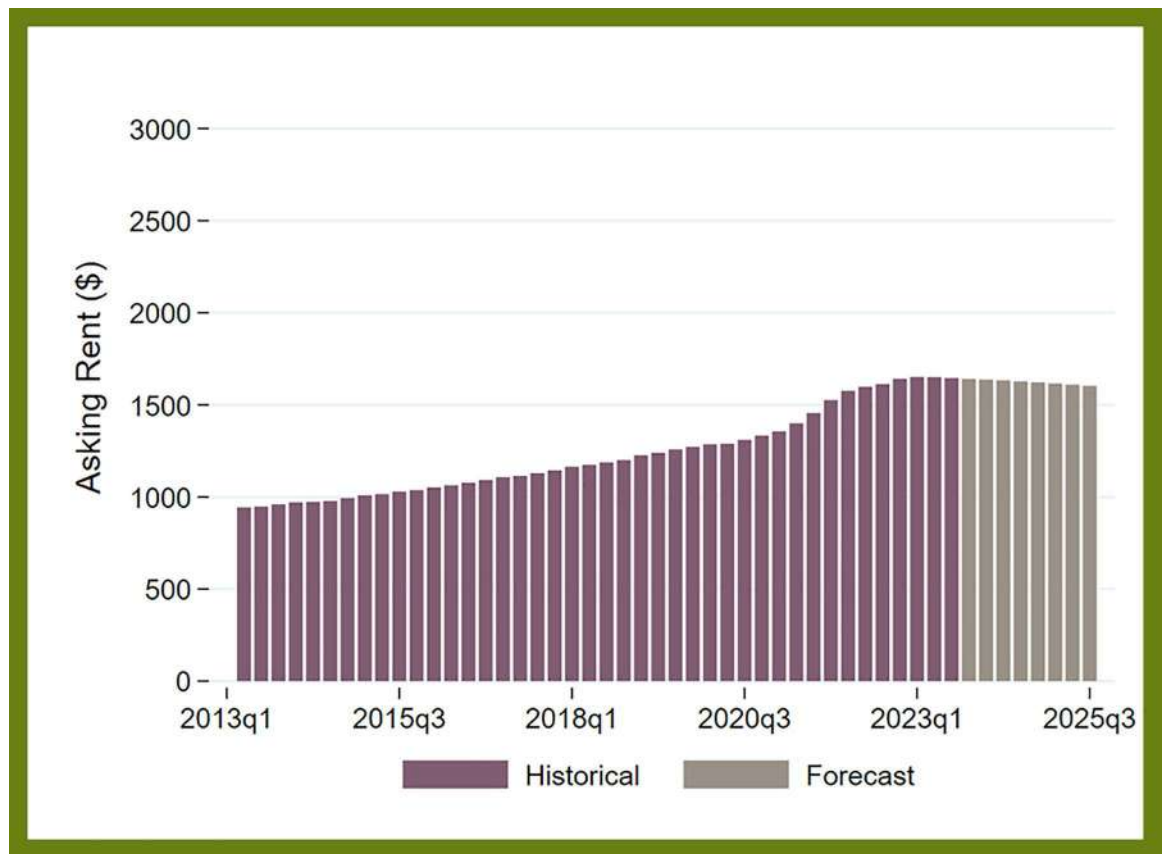


PALM SPRINGS-INDIO

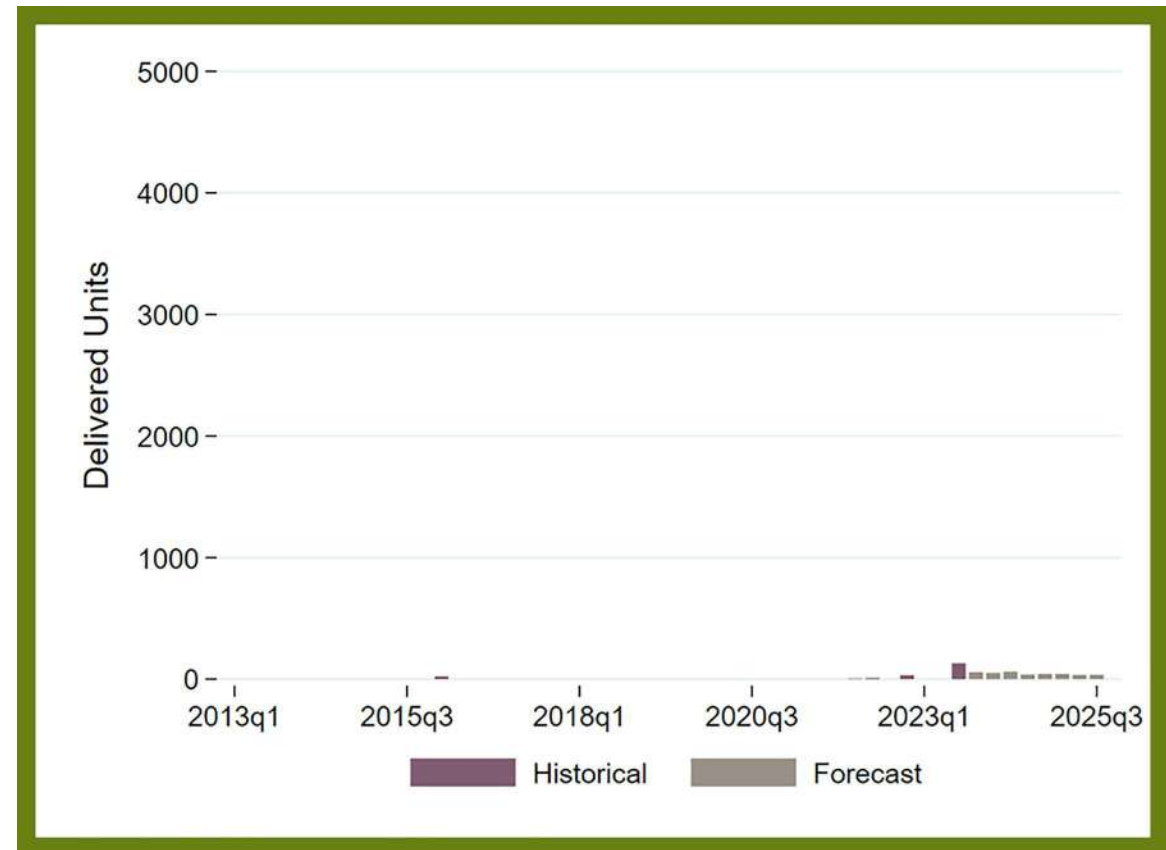
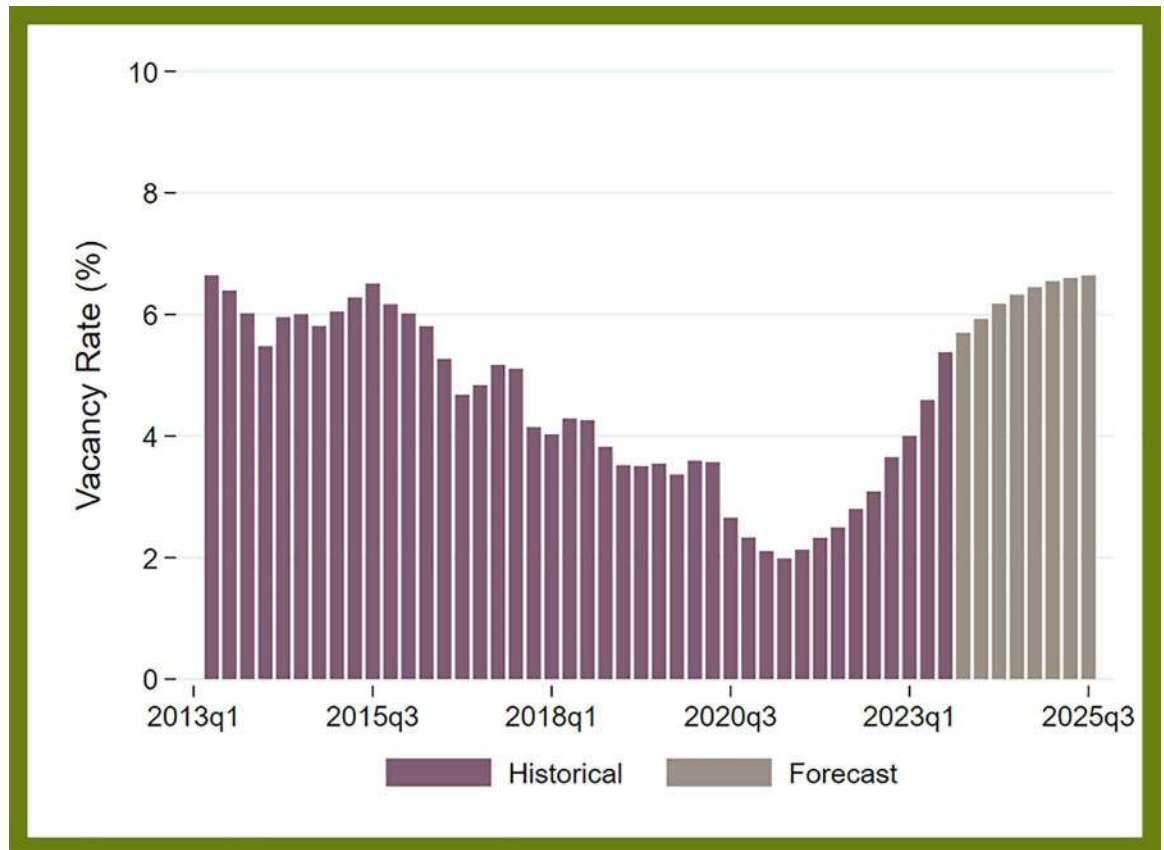
	ALL	RENTERS
RACE		
white only(%)	37.19	23.56
black only(%)	3.01	4.80
asian only(%)	3.59	5.49
hispanic(%)	53.63	64.06
other race(%)	2.58	2.09
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	15.81	17.76
highschool diploma, 18 yrs or more(%)	22.78	24.82
some college education, 18 yrs or more(%)	24.38	21.58
bachelors degree, 18 yrs or more(%)	11.75	7.69
more than bachelors degree, 18 yrs or more(%)	7.51	3.22
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		35.96
renter households living in 2-4 unit housing(%)		17.78
renter households living in 5-9 unit housing(%)		15.59
renter households living in 10-19 unit housing(%)		8.21
renter households living in 20+ unit housing(%)		14.82
renter households living in other types of housing(%)		7.64
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		20.91
renter households living in a structure built between 1970 and 1999(%)		58.89
renter households living in a structure built between 2000 and 2009(%)		16.26
renter households living in a structure built between 2010 and 2019(%)		3.71
renter households living in a structure built in 2020 and 2021(%)		0.22
HOUSEHOLD STATISTICS		
share of renter households(%)	33.64	
share of renter households living in multifamily structure(%)		38.62
share of rent-burdened households(%)		55.92
share of households with children(%)	30.24	34.21
average household size	2.51	2.36
median household income	\$61,590	\$39,137
MIGRATION STATISTICS		
population living in the same house for over a year(%)	89.45	88.59
population who moved within CA last year(%)	8.02	8.95
population who moved from other states to CA last year(%)	1.34	0.71
population who moved from abroad last year(%)	0.34	0.19

Source: 2021 1-Year American Community Survey

Palm Springs-Indio Market · Asking Rents · Rent Growth · Inland Empire, 2013-2025

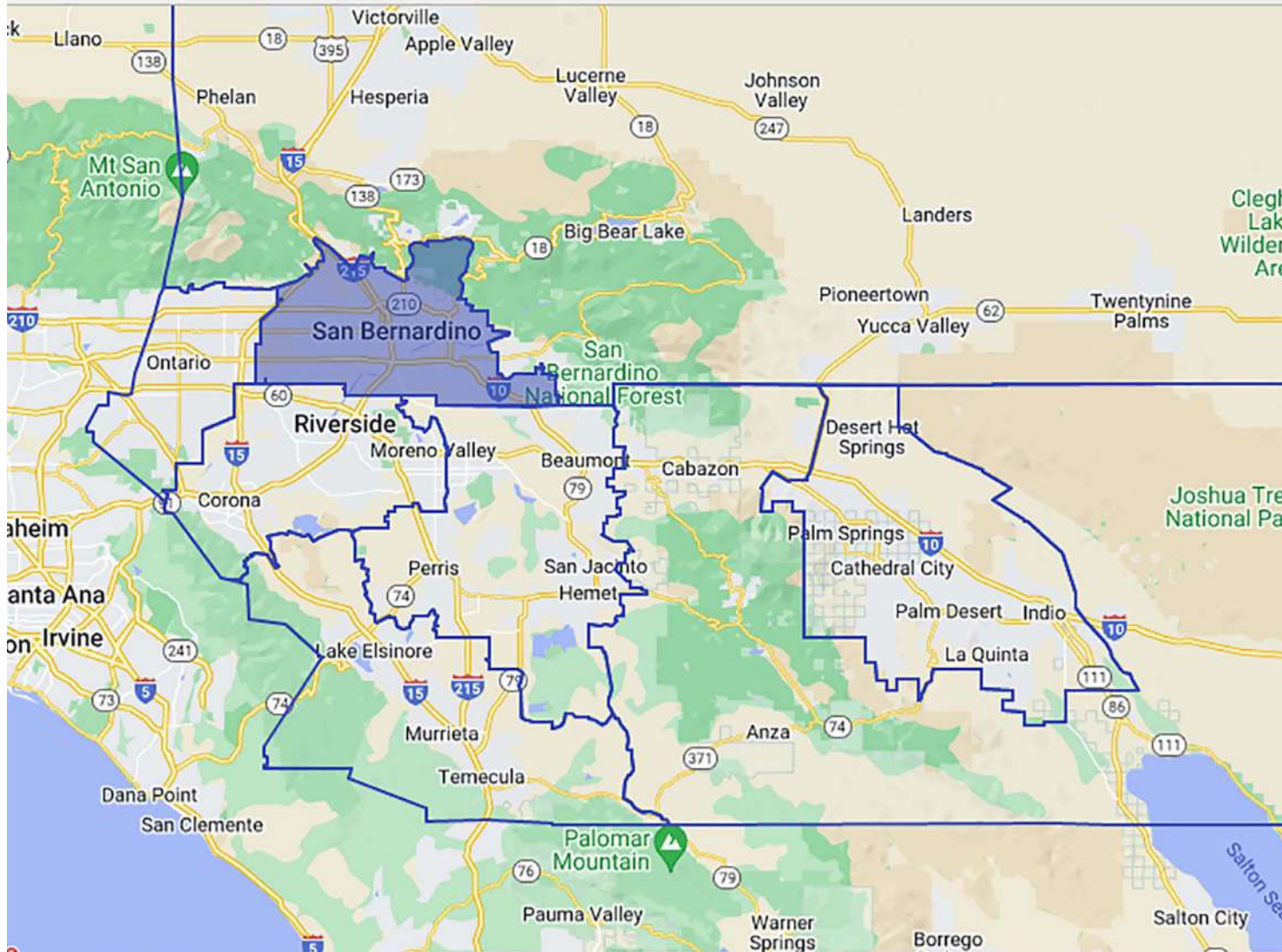


Palm Springs-Indio Market Vacancy · Delivered Units · Inland Empire, 2013-2025



Source: USC Casden forecasts based on CoStar data

Redlands- Fontana

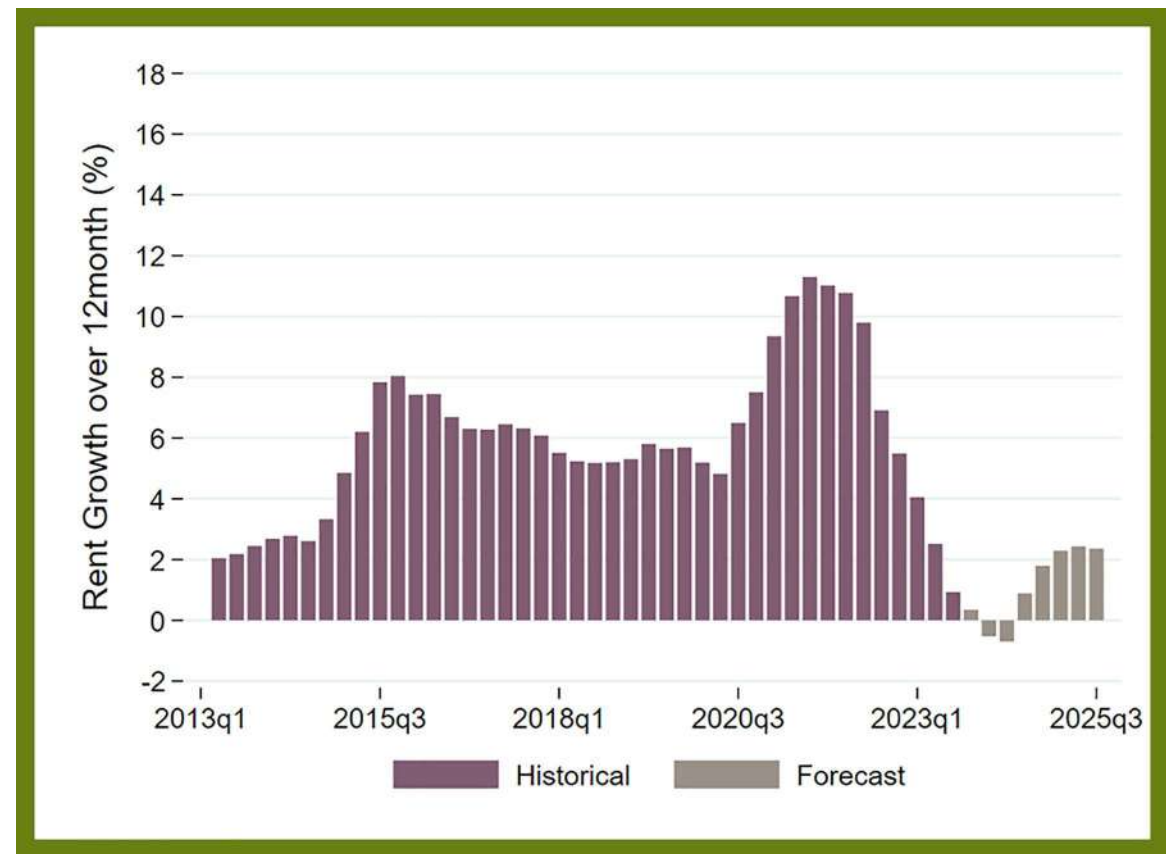
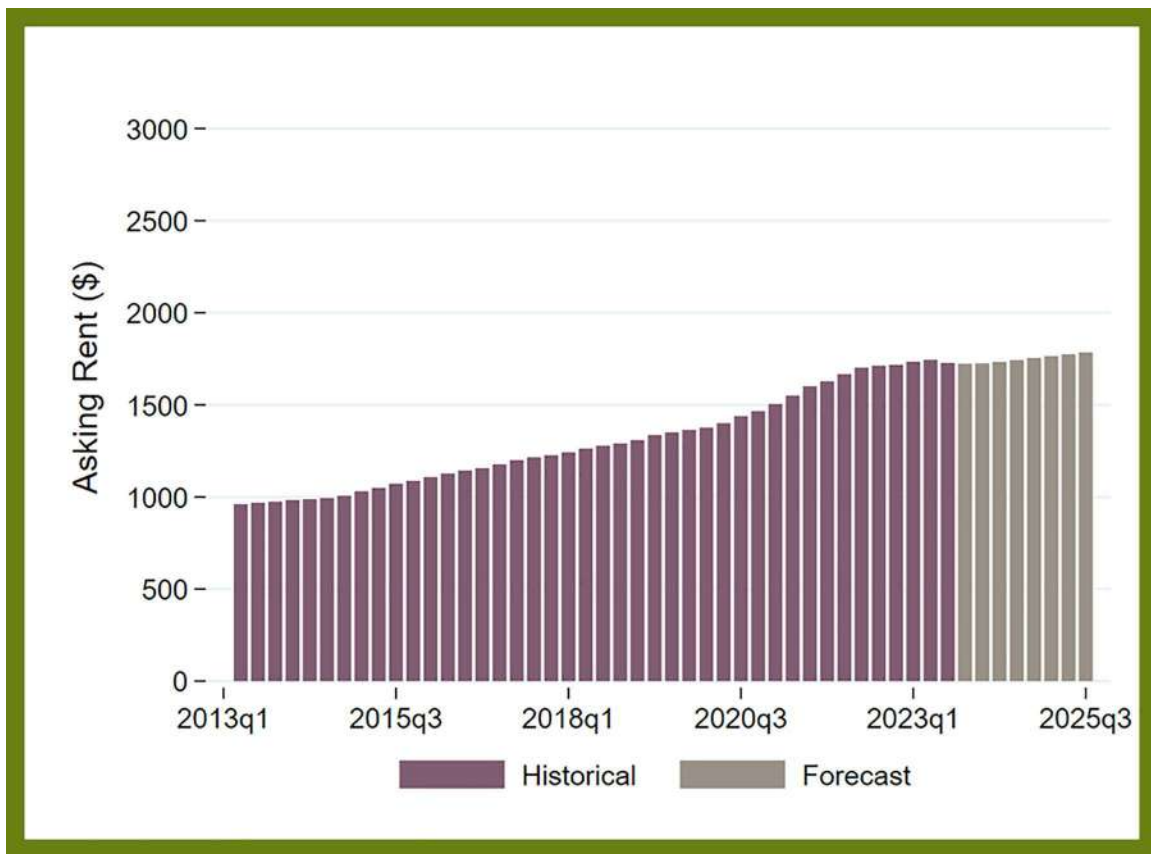


REDLANDS-FONTANA

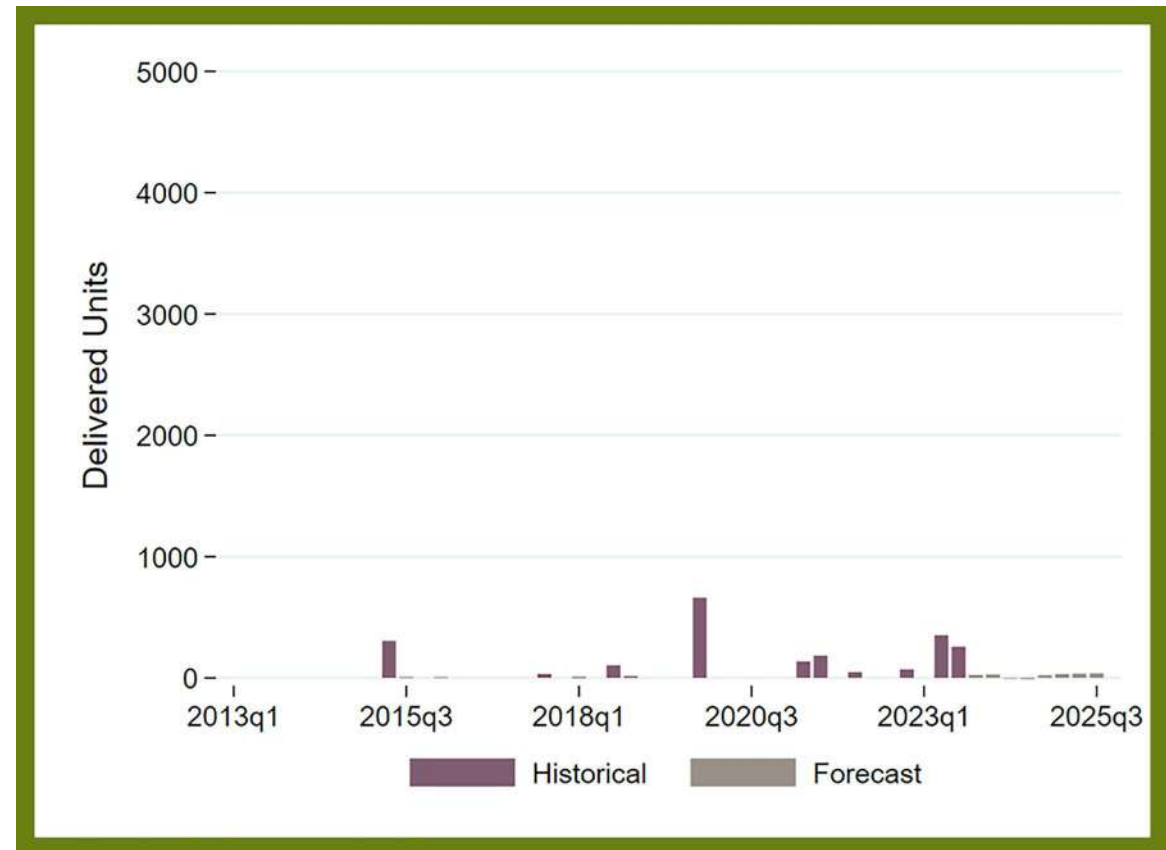
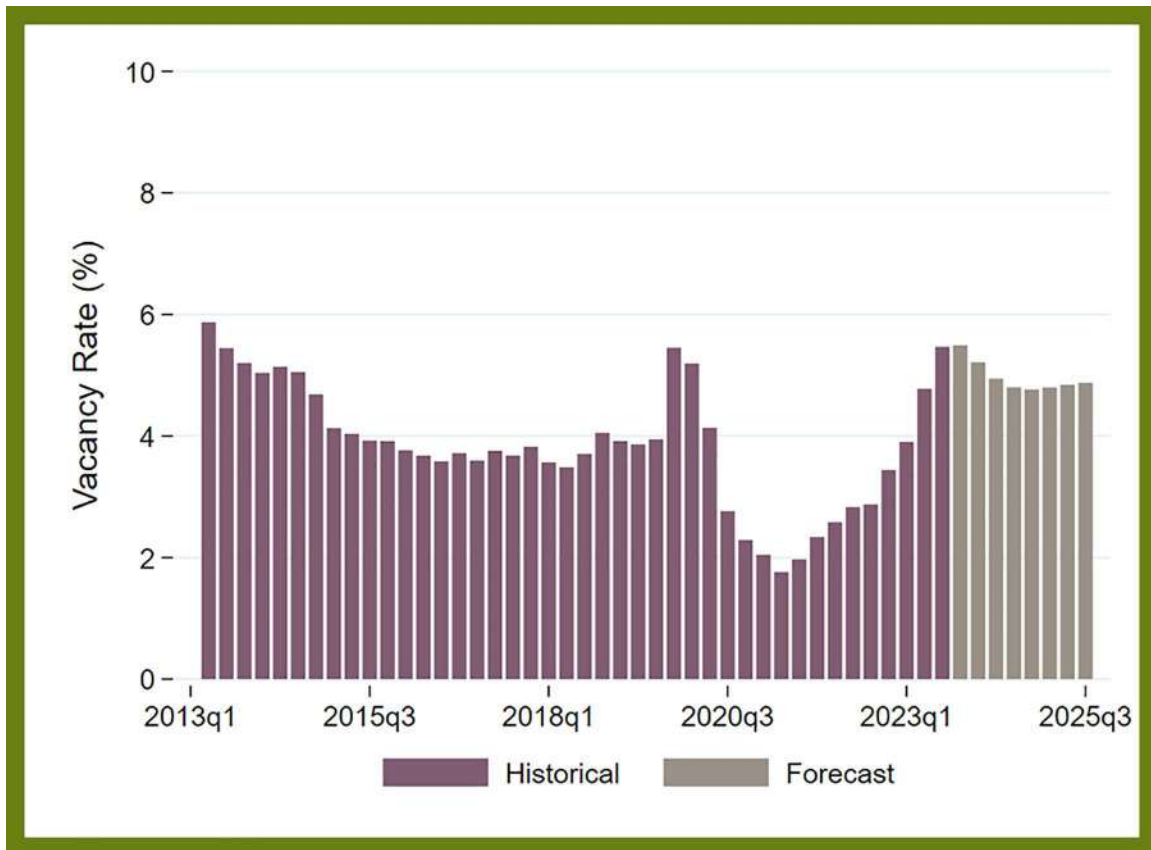
	ALL	RENTERS
RACE		
white only(%)	17.27	13.91
black only(%)	8.31	10.99
asian only(%)	5.24	4.17
hispanic(%)	66.10	67.23
other race(%)	3.08	3.70
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	14.16	15.29
highschool diploma, 18 yrs or more(%)	24.71	26.21
some college education, 18 yrs or more(%)	21.12	19.12
bachelors degree, 18 yrs or more(%)	8.79	6.45
more than bachelors degree, 18 yrs or more(%)	4.37	2.40
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		44.92
renter households living in 2-4 unit housing(%)		12.13
renter households living in 5-9 unit housing(%)		5.95
renter households living in 10-19 unit housing(%)		5.67
renter households living in 20+ unit housing(%)		28.63
renter households living in other types of housing(%)		2.69
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		29.72
renter households living in a structure built between 1970 and 1999(%)		55.09
renter households living in a structure built between 2000 and 2009(%)		9.98
renter households living in a structure built between 2010 and 2019(%)		4.69
renter households living in a structure built in 2020 and 2021(%)		0.52
HOUSEHOLD STATISTICS		
share of renter households(%)	40.65	
share of renter households living in multifamily structure(%)		40.26
share of rent-burdened households(%)		51.72
share of households with children(%)	55.86	54.46
average household size	3.37	3.17
median household income	\$74,979	\$56,646
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.59	87.03
population who moved within CA last year(%)	7.90	10.99
population who moved from other states to CA last year(%)	0.53	0.75
population who moved from abroad last year(%)	0.08	0.06

Source: 2021 1-Year American Community Survey

Redlands-Fontana · Asking Rents · Rent Growth · Inland Empire, 2013-2025

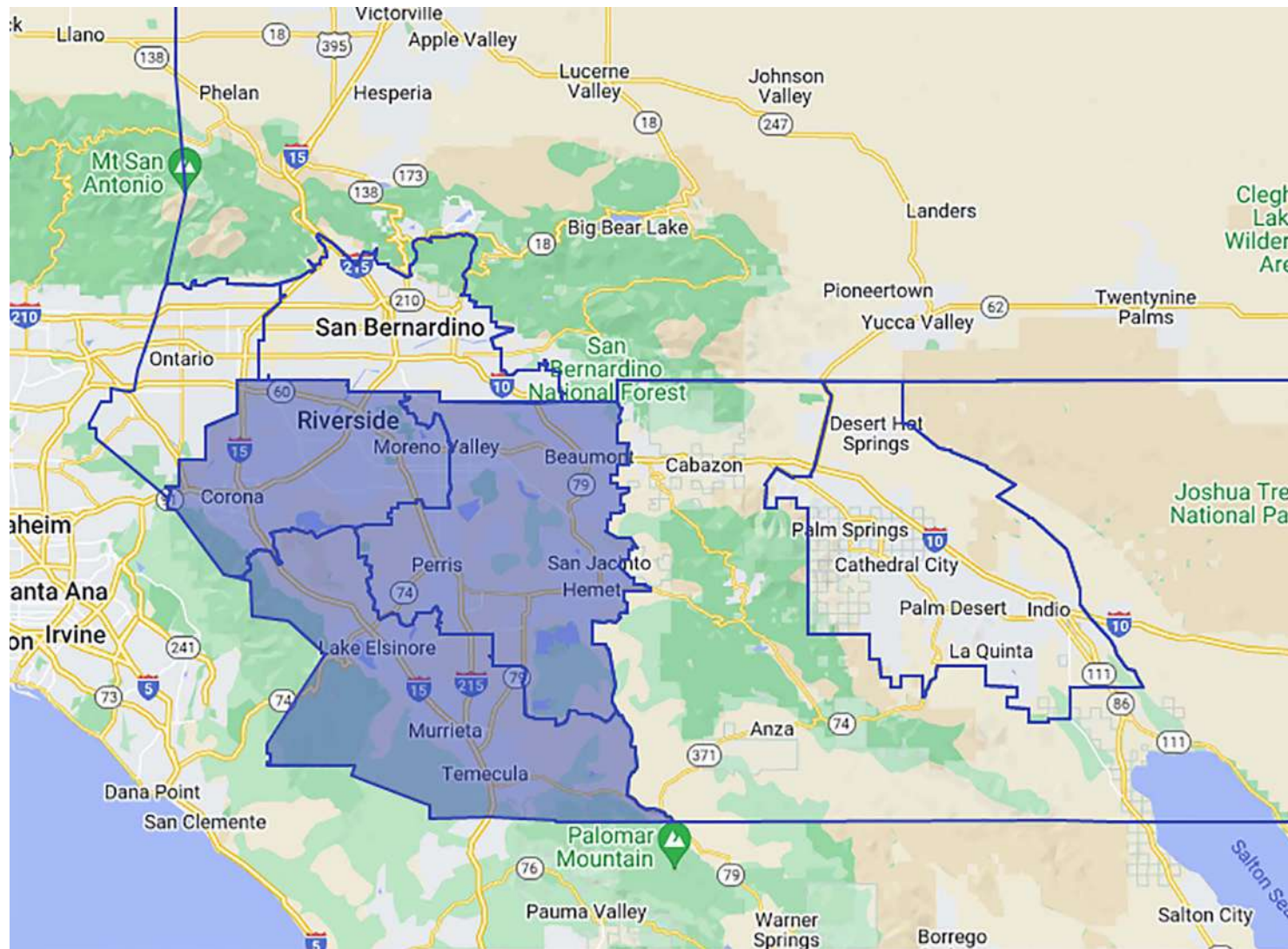


Redlands-Fontana Vacancy · Delivered Units · Inland Empire, 2013-2025



Source: USC Casden forecasts based on CoStar data

West Riverside County

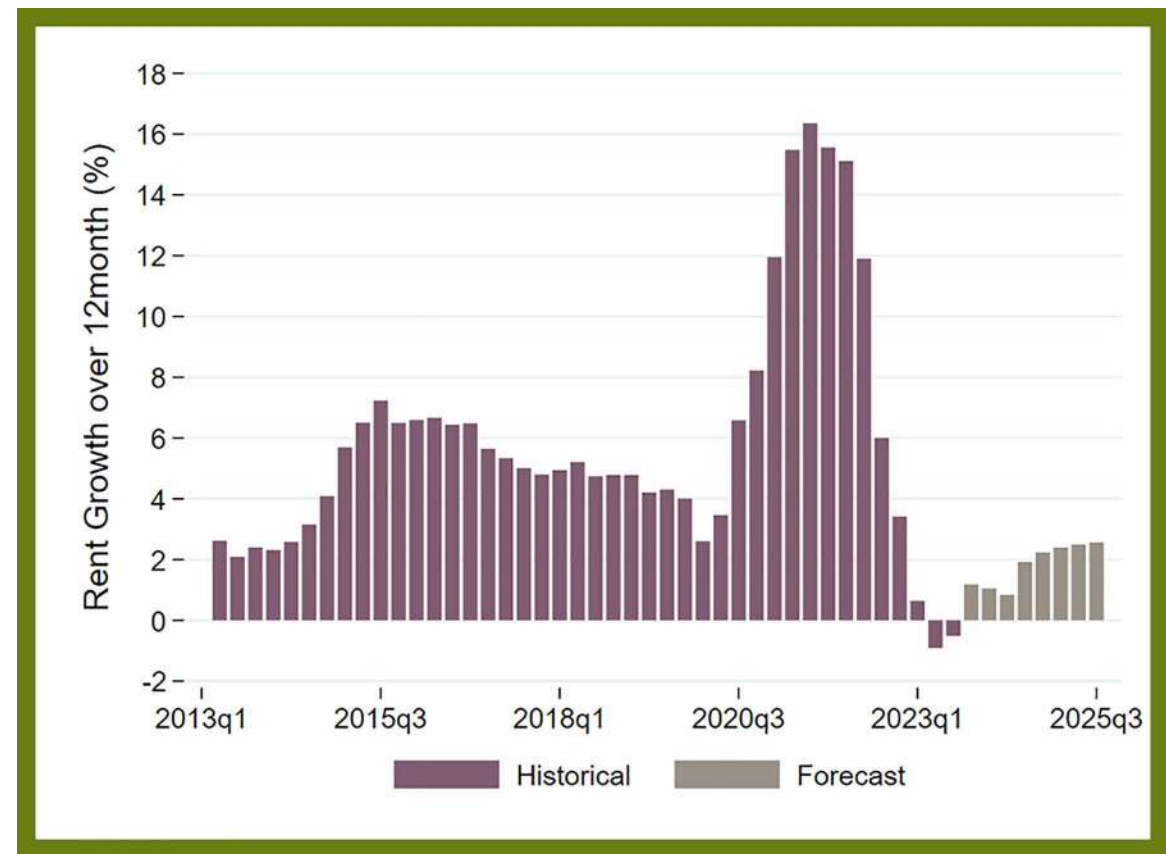
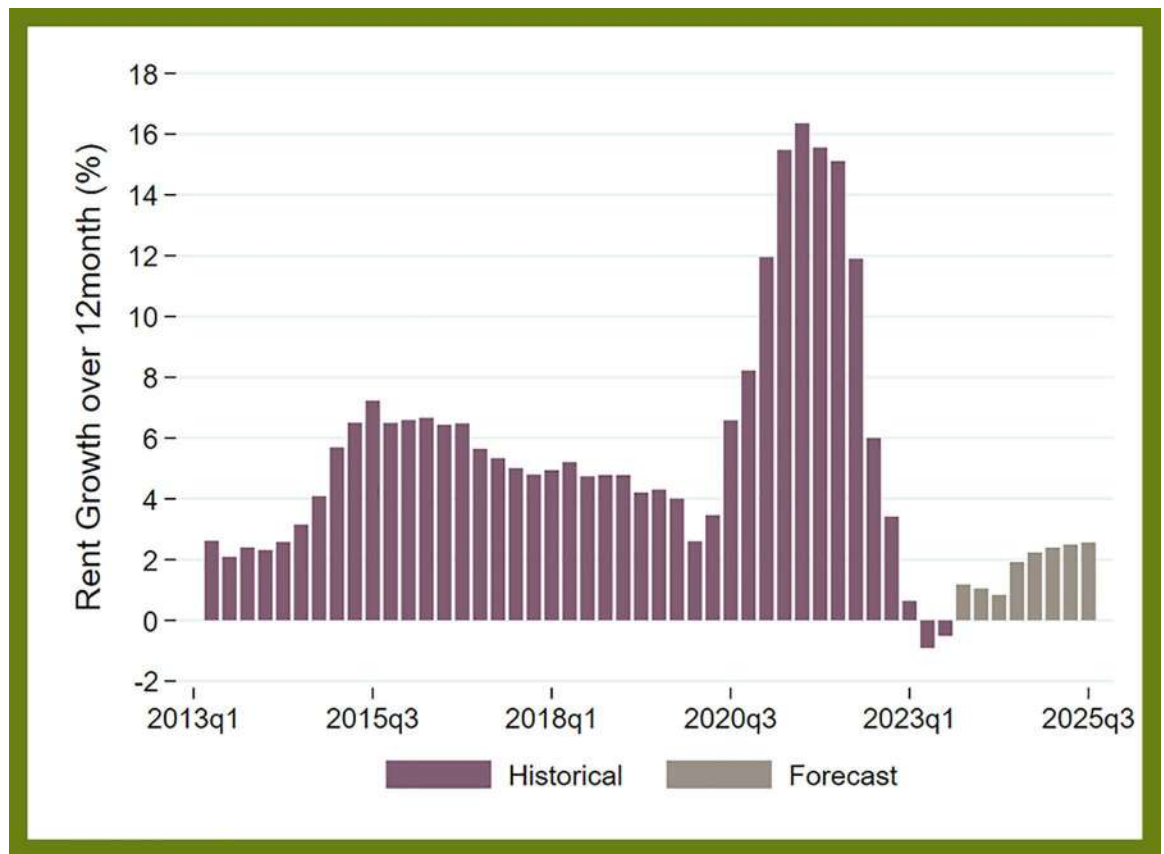


WEST RIVERSIDE COUNTY

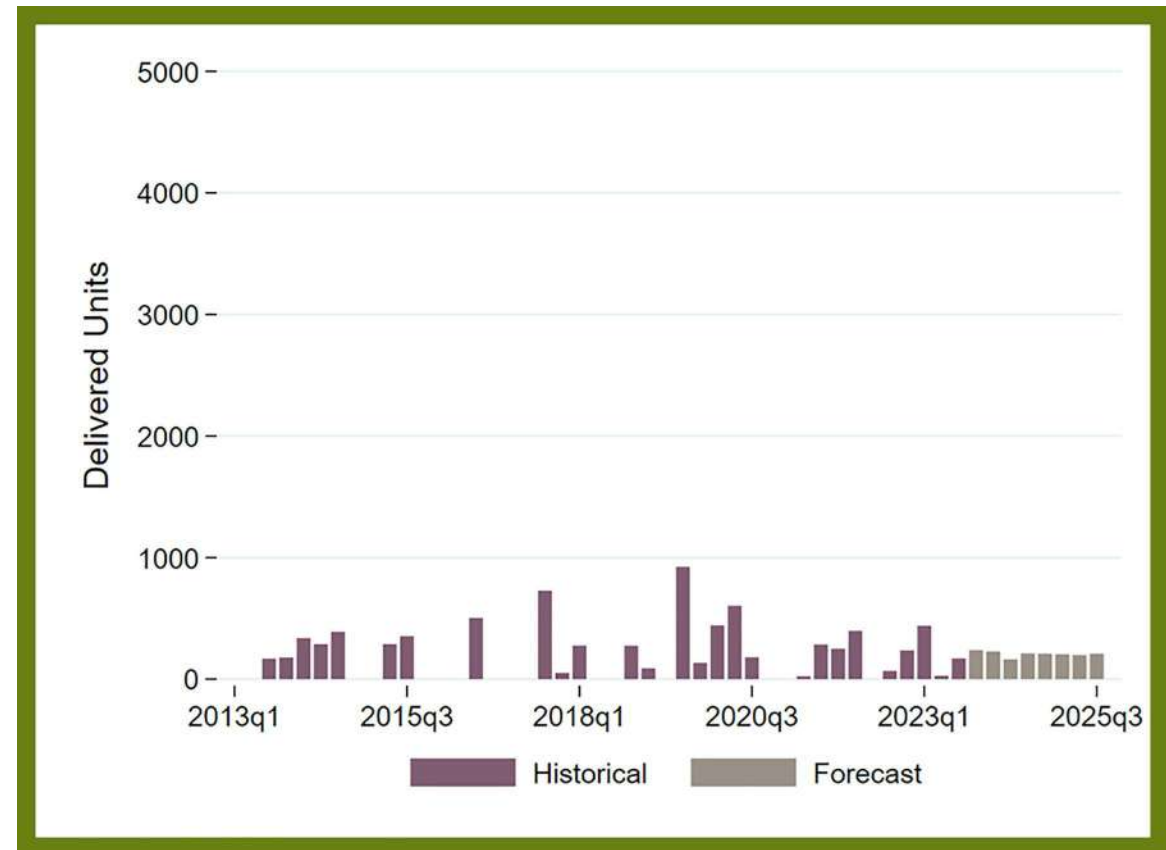
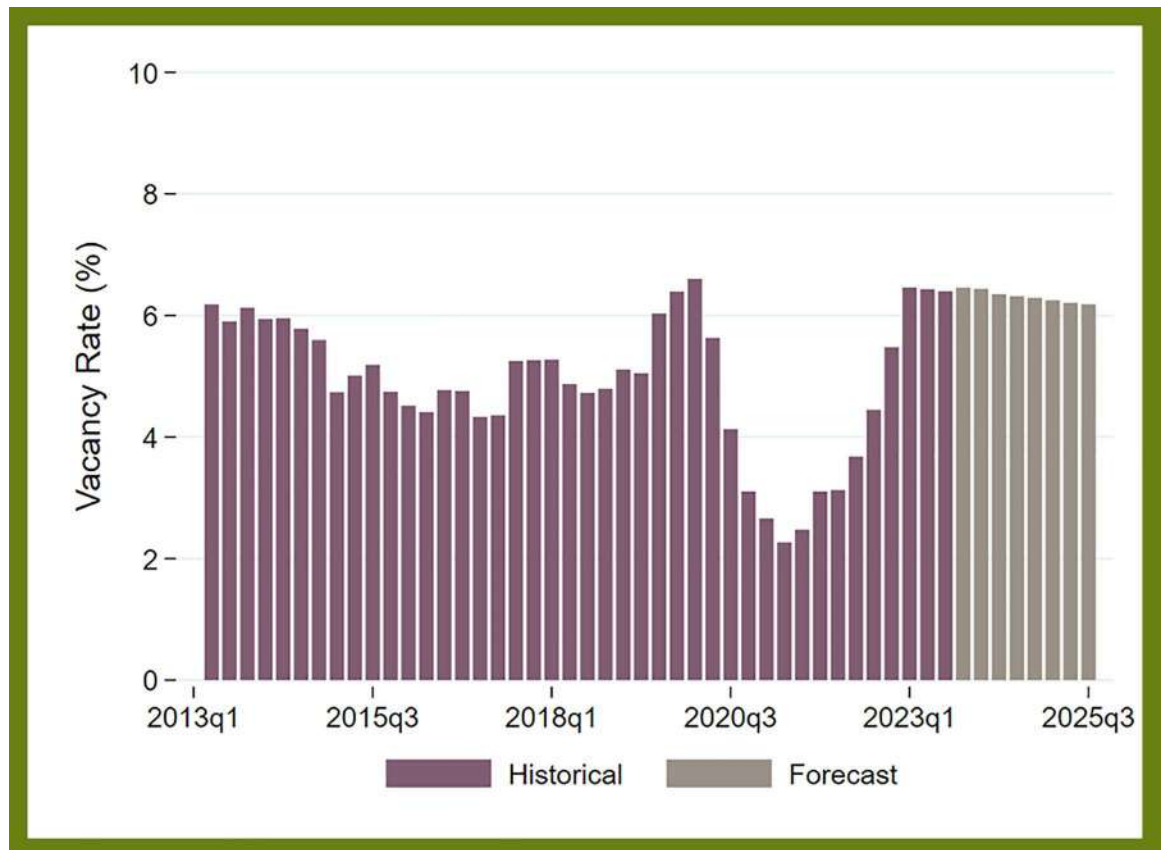
	ALL	RENTERS
RACE		
white only(%)	29.63	22.95
black only(%)	6.94	8.63
asian only(%)	7.45	4.31
hispanic(%)	51.09	60.25
other race(%)	4.88	3.86
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	10.95	12.87
highschool diploma, 18 yrs or more(%)	21.72	24.38
some college education, 18 yrs or more(%)	25.32	21.99
bachelors degree, 18 yrs or more(%)	10.61	7.22
more than bachelors degree, 18 yrs or more(%)	5.34	2.81
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		49.86
renter households living in 2-4 unit housing(%)		9.77
renter households living in 5-9 unit housing(%)		11.73
renter households living in 10-19 unit housing(%)		8.08
renter households living in 20+ unit housing(%)		14.88
renter households living in other types of housing(%)		5.68
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		20.53
renter households living in a structure built between 1970 and 1999(%)		48.57
renter households living in a structure built between 2000 and 2009(%)		20.20
renter households living in a structure built between 2010 and 2019(%)		10.25
renter households living in a structure built in 2020 and 2021(%)		0.45
HOUSEHOLD STATISTICS		
share of renter households(%)	31.02	
share of renter households living in multifamily structure(%)		34.69
share of rent-burdened households(%)		54.07
share of households with children(%)	54.21	55.01
average household size	3.44	3.28
median household income	\$83,836	\$58,706
MIGRATION STATISTICS		
population living in the same house for over a year(%)	89.21	86.49
population who moved within CA last year(%)	8.75	11.34
population who moved from other states to CA last year(%)	0.70	0.76
population who moved from abroad last year(%)	0.22	0.11

Source: 2021 1-Year American Community Survey

West Riverside County Market · Asking Rents · Rent Growth · Inland Empire, 2013-2025



West Riverside County Vacancy · Delivered Units · Inland Empire, 2013-2025



Source: USC Casden forecasts based on CoStar data

San Diego



SAN DIEGO COUNTY

	ALL	RENTERS
RACE		
white only(%)	42.63	33.58
black only(%)	4.35	6.11
asian only(%)	12.01	9.01
hispanic(%)	34.85	45.52
other race(%)	6.17	5.78
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	8.57	11.14
highschool diploma, 18 yrs or more(%)	16.21	17.29
some college education, 18 yrs or more(%)	23.51	23.18
bachelors degree, 18 yrs or more(%)	19.00	16.13
more than bachelors degree, 18 yrs or more(%)	11.52	8.25
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		31.36
renter households living in 2-4 unit housing(%)		12.78
renter households living in 5-9 unit housing(%)		12.6
renter households living in 10-19 unit housing(%)		12.29
renter households living in 20+ unit housing(%)		29.13
renter households living in other types of housing(%)		1.83
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		28.75
renter households living in a structure built between 1970 and 1999(%)		51.47
renter households living in a structure built between 2000 and 2009(%)		10.46
renter households living in a structure built between 2010 and 2019(%)		8.66
renter households living in a structure built in 2020 and 2021(%)		0.66
HOUSEHOLD STATISTICS		
share of renter households(%)	45.28	
share of renter households living in multifamily structure(%)		54.02
share of rent-burdened households(%)		55.45
share of households with children(%)	39.84	37.84
average household size	2.83	2.65
median household income	\$91,870	\$66,636
MIGRATION STATISTICS		
population living in the same house for over a year(%)	85.08	79.55
population who moved within CA last year(%)	10.58	14.43
population who moved from other states to CA last year(%)	2.47	3.54
population who moved from abroad last year(%)	0.81	1.16

Source: 2021 1-Year American Community Survey

San Diego County

In many respects, San Diego County is very similar to Orange County. It also has a diversified economy that is a thriving hub for the life and biomedical sciences, and technology-oriented industries. San Diego County benefits from housing a sizable population of U.S. military personnel. Due to its exceptional climate, San Diego County attracts a well-educated, talented workforce and well-off retirees which have contributed to the strength of the economy. The county ranks third in income after Orange County and Ventura County with 2021 median household and renter incomes of \$91,870 and \$66,636, respectively. San Diego’s unemployment rate has been lower than the state’s average, but it has recently gone up from 3.2% a year ago to 4% at the end of 2023Q3, along with the rest of the U.S. economy.

Like its northern neighbor, San Diego County also experienced a negative net emigration of 20,500 in 2019 and 9,500 in 2021 mostly to the Inland Empire (Riverside). Emigration to and from Los Angeles County has been unstable. After losing a relatively small number of residents to Los Angeles in 2019, San Diego County experienced a larger inflow of population from Los Angeles County in 2021 because of the pandemic. People are moving to San Diego County likely for jobs and quality of life, whereas more of its residents, particularly those at the lower end of the income distribution, are leaving the county because of high rents.

Even though they share a lot of similarities, including population size, San Diego County builds more rental housing than Orange County. Despite current high interest rates, San Diego issued permits for 5,600 multifamily units so far this year, which is 22% higher than the number of permits issued during the same time last year – in contrast, Orange County only permitted 2,700 units. This potential

People are moving to San Diego County likely for jobs and quality of life, whereas more of its residents, particularly those at the lower end of the income distribution, are leaving the county because of high rents.

additional supply amounts to about 2% of the existing inventory of rental units, which is not negligible if sustained. We project quarterly unit deliveries to drop from 700 to 620 units over the next two years. Vacancy will grow from 4% to 4.6% as rent increases by about 2% annually from \$2,421 to \$2,540.

San Diego County will remain the third most expensive region in Southern California after Orange County and Ventura County. Over the next several quarters, San Diego County is expected to experience slower rent growth than in the past as vacancy increases above the critical threshold of 4%.

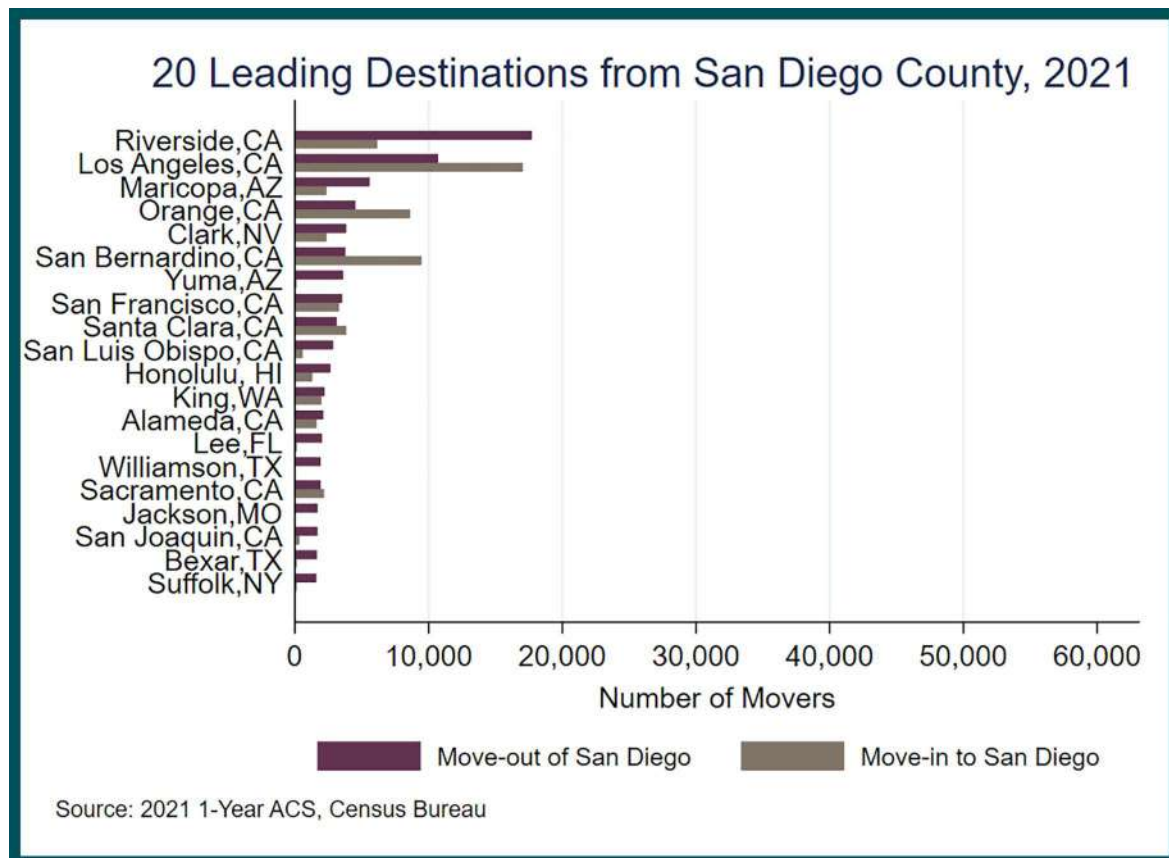
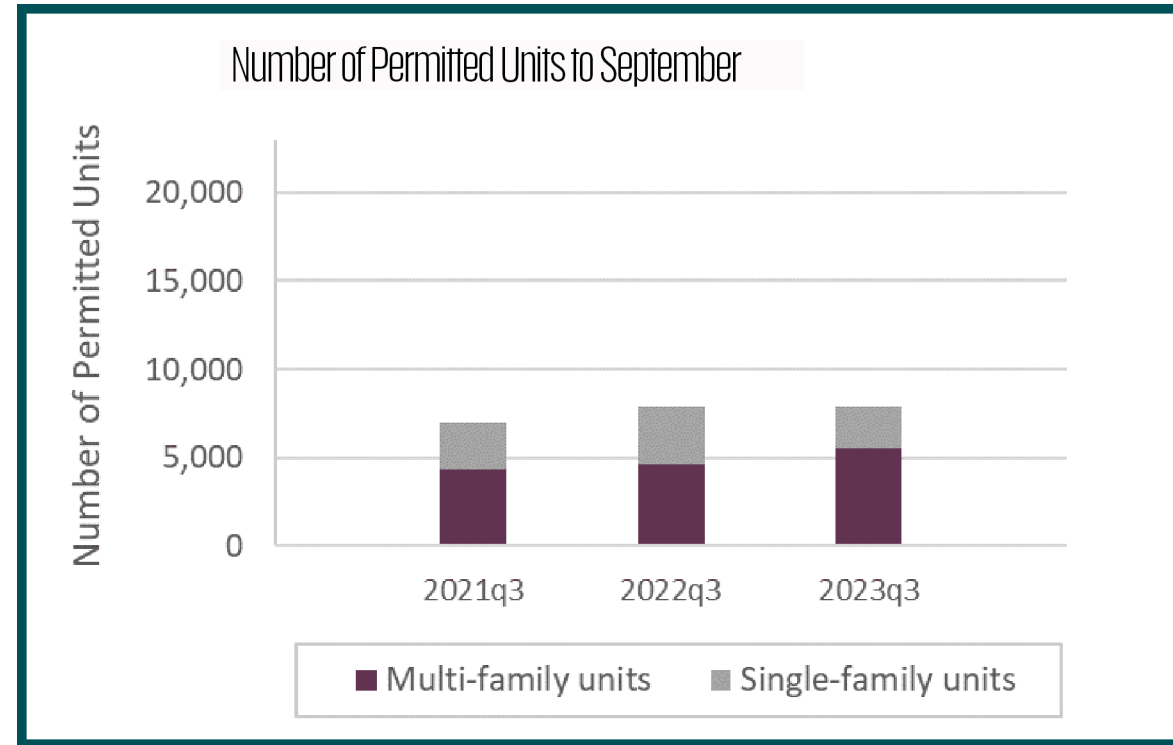
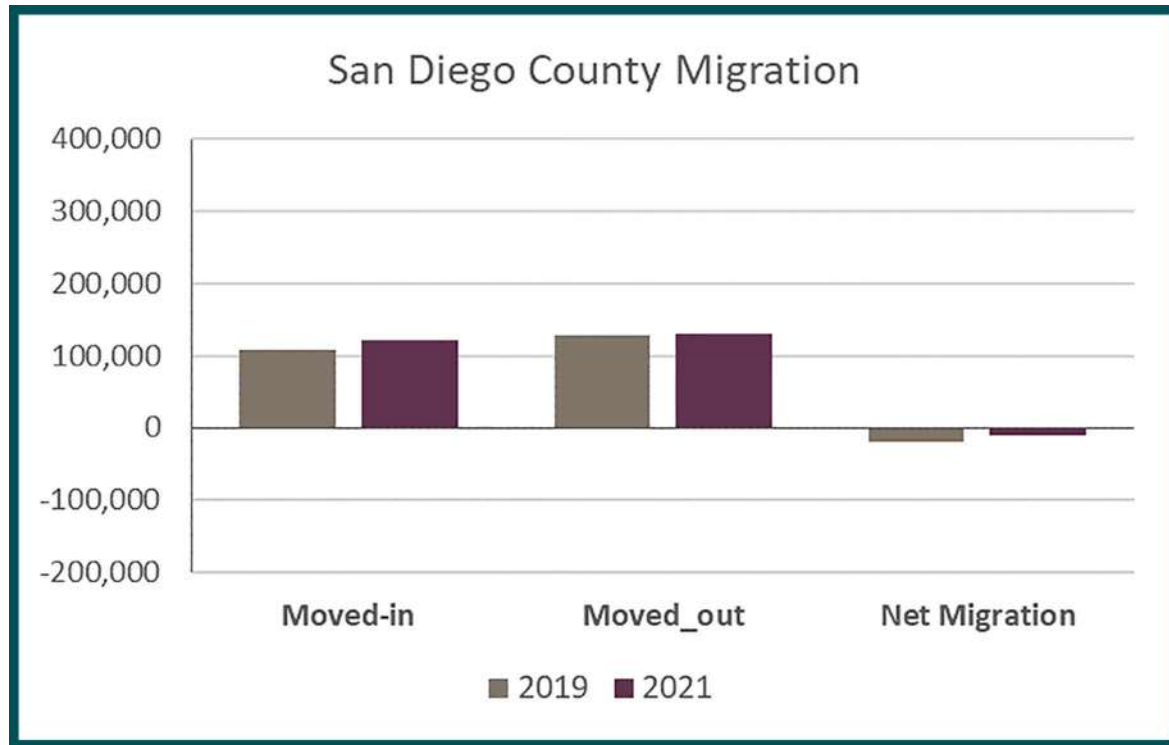
EMPLOYMENT LOCATION QUOTIENTS, 2023 1ST QUARTER

INDUSTRY • SAN DIEGO COUNTY

All industries	0.99
Goods-producing	0.96
Natural resources and mining	0.55
Construction	1.15
Manufacturing	0.90
Service-providing	0.99
Trade, transportation, and utilities	0.78
Information	0.71
Financial activities	0.83
Professional and business services	1.22
Education and health services	0.95
Leisure and hospitality	1.22
Other services	1.17
Unclassified	0.48

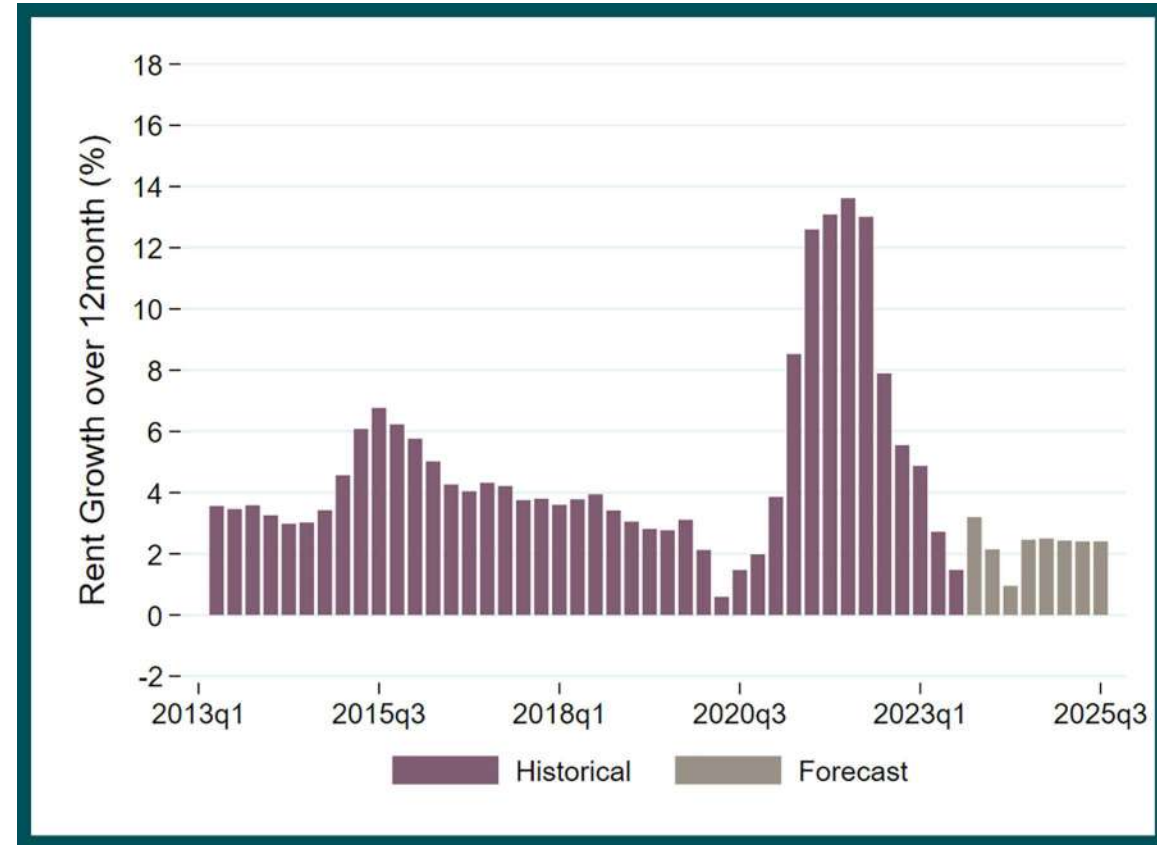
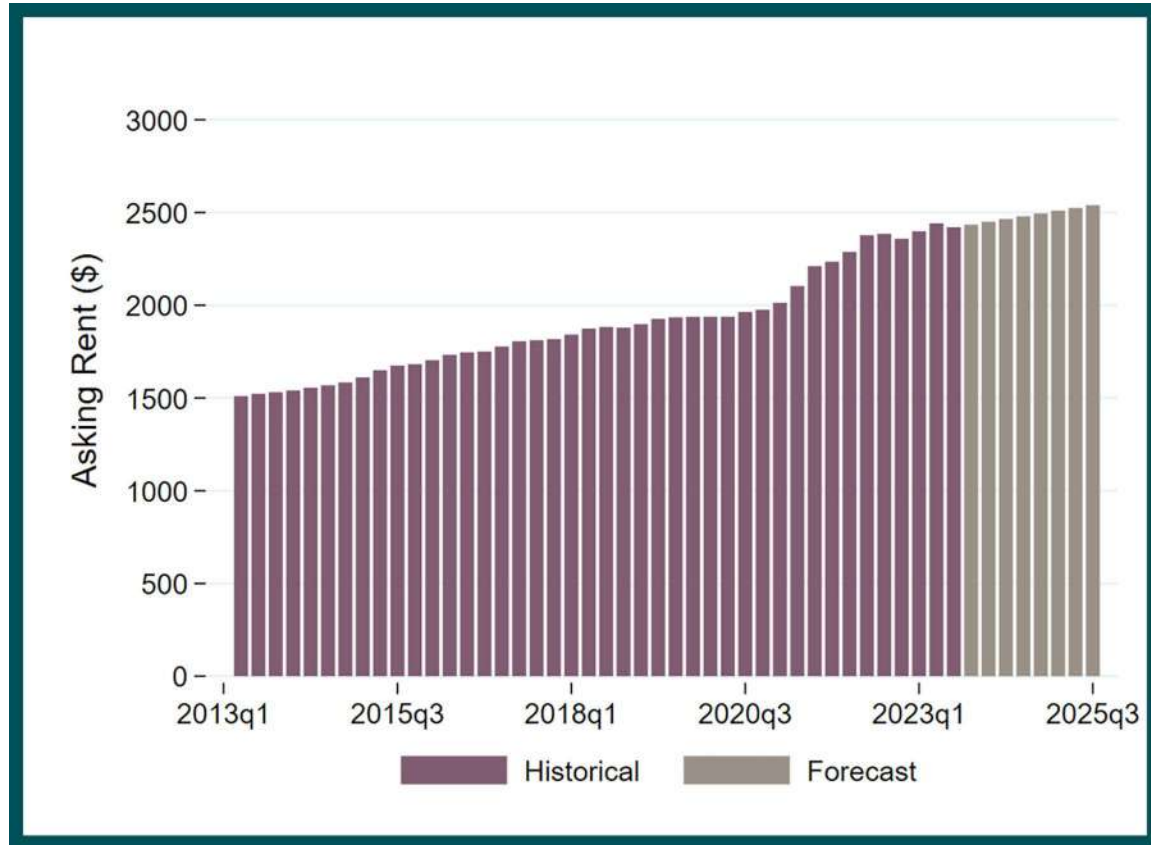
Source: U.S. Bureau of Labor Statistics

Migration - San Diego County, 2019 & 2021

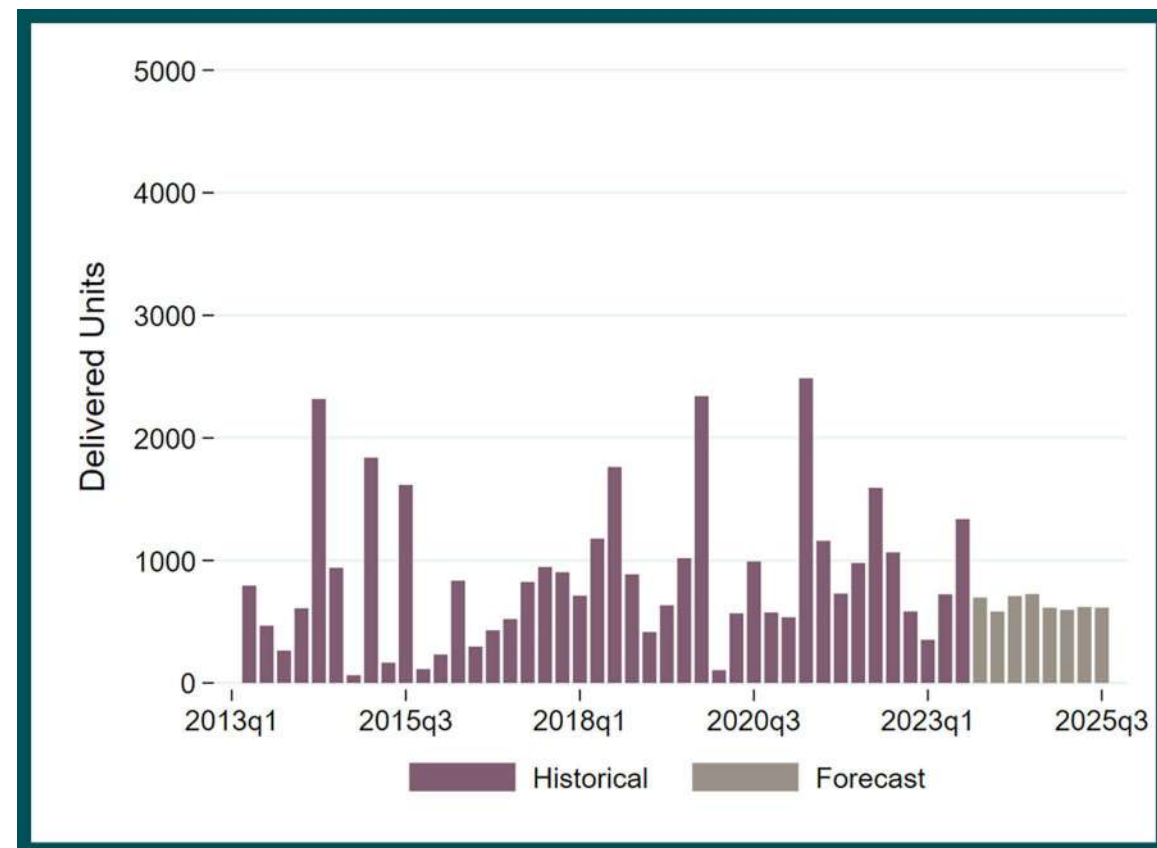
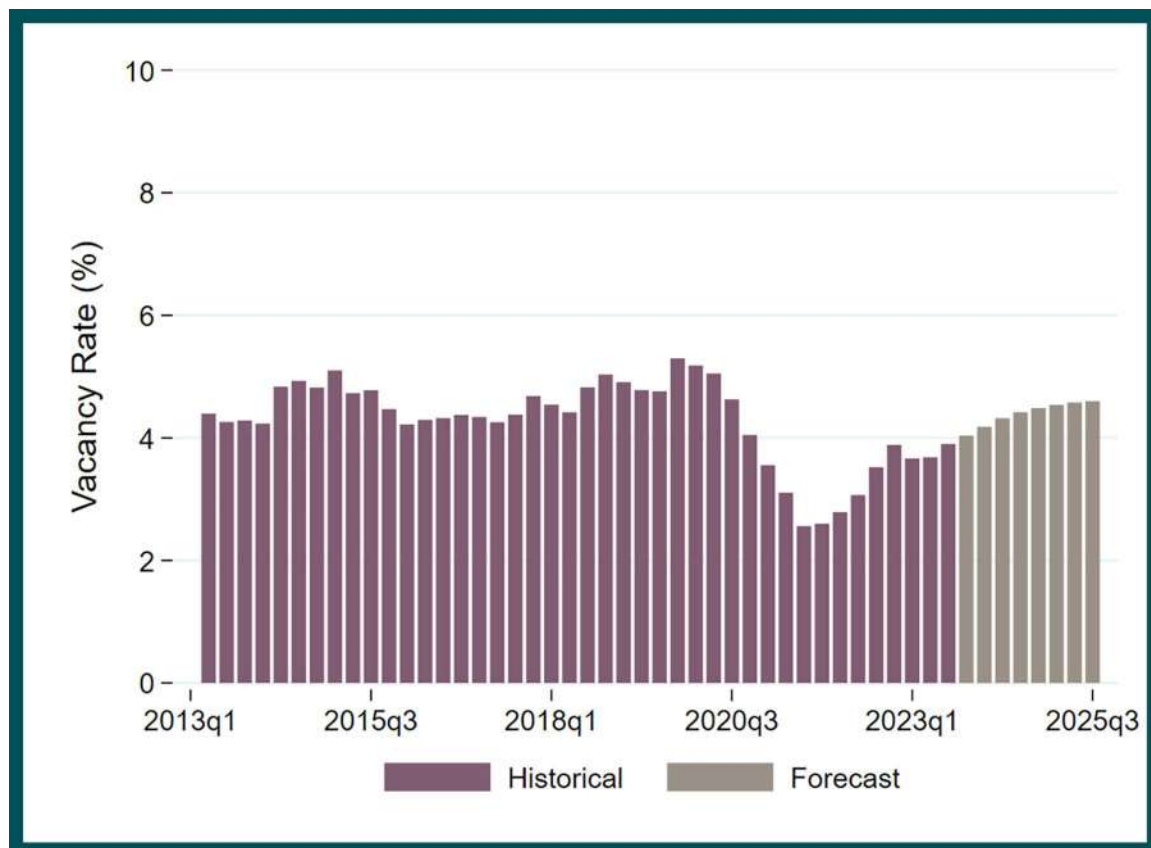


Source: 2021 1-Year American Community Survey

San Diego County Asking Rents · Rent Growth San Diego County, 2013-2025

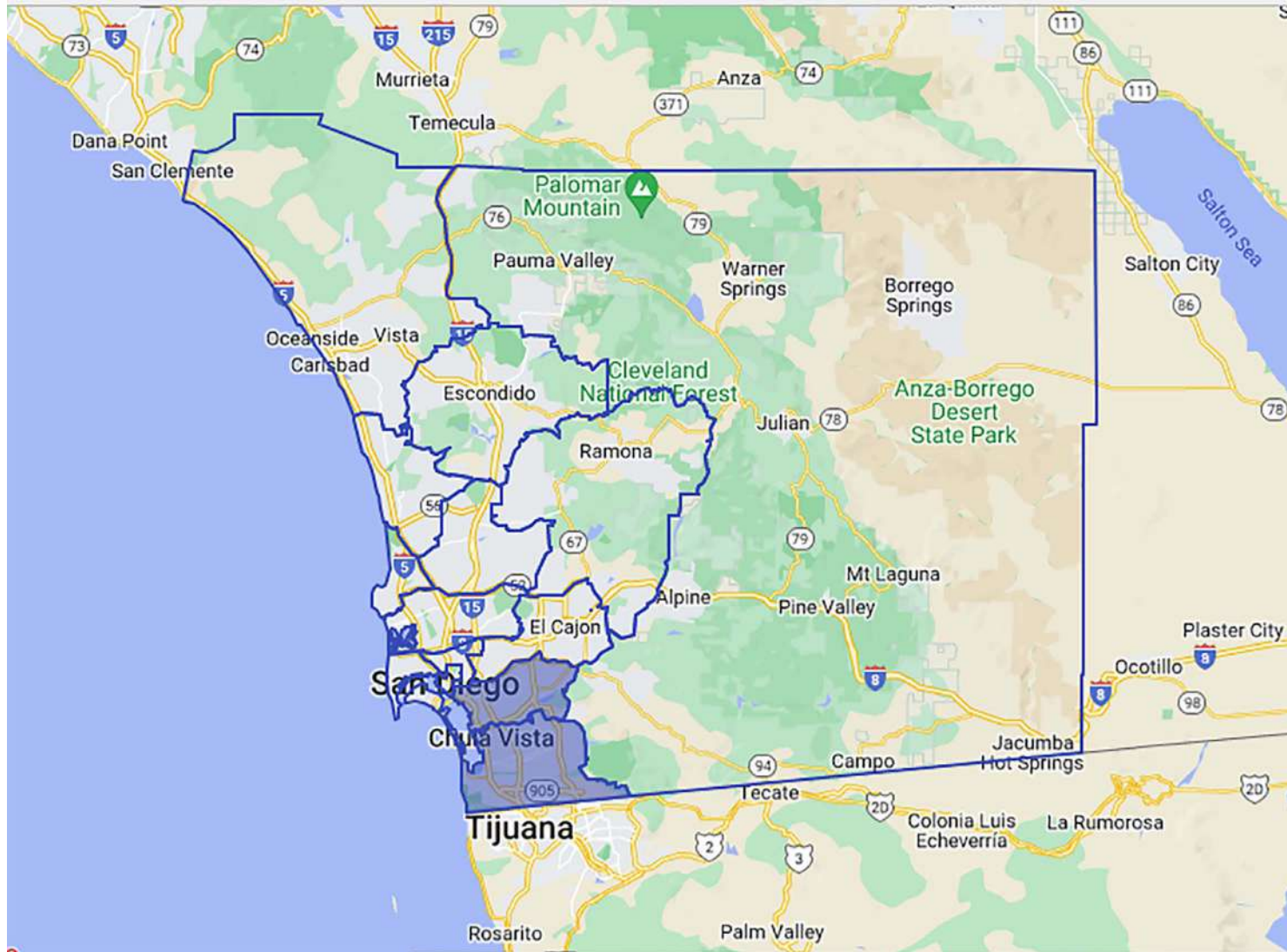


San Diego County Vacancy · Delivered Units · San Diego County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Chula Vista-National City

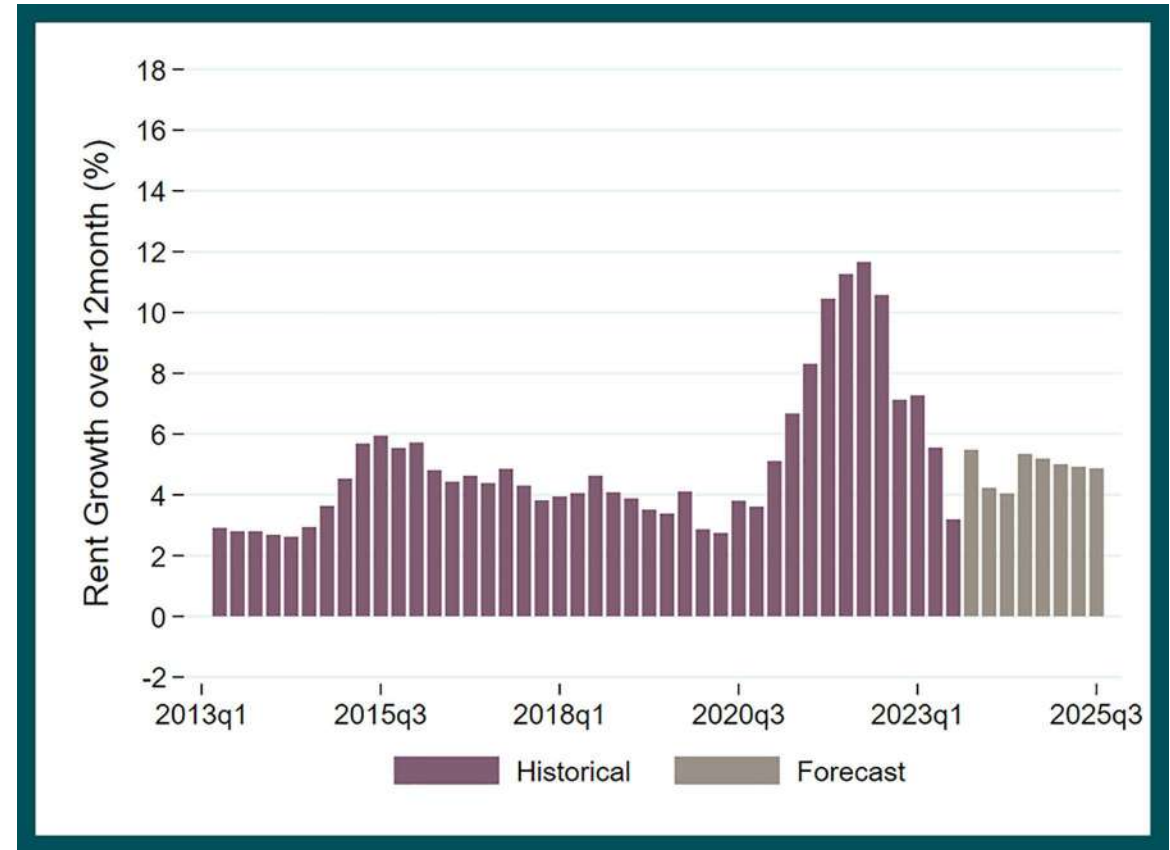
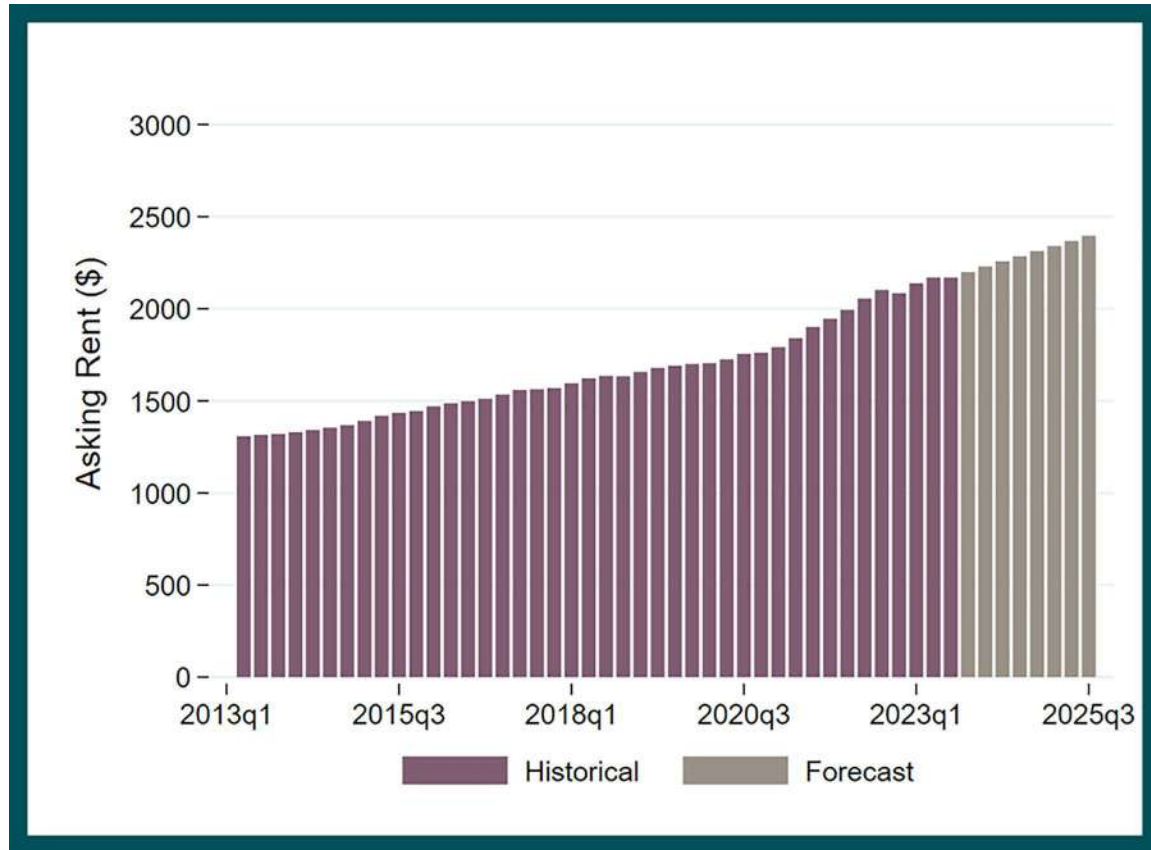


CHULA VISTA-NATIONAL CITY

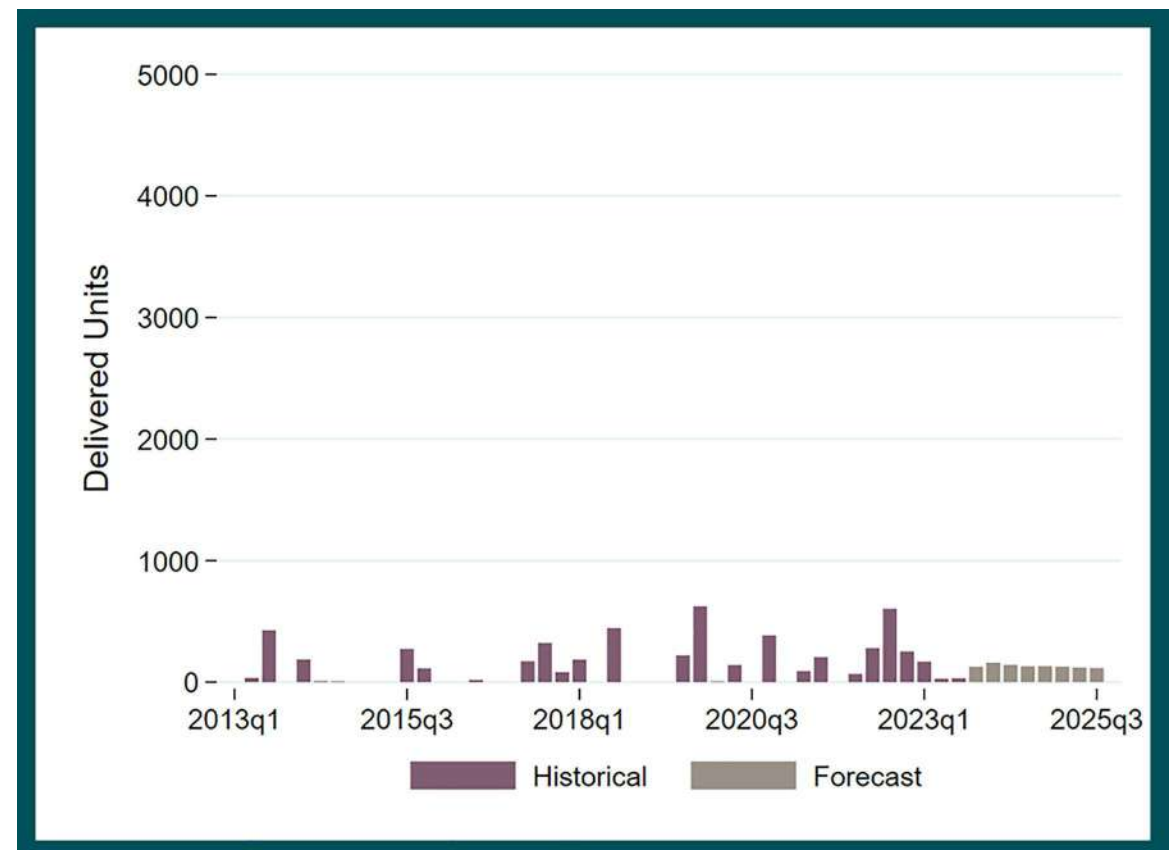
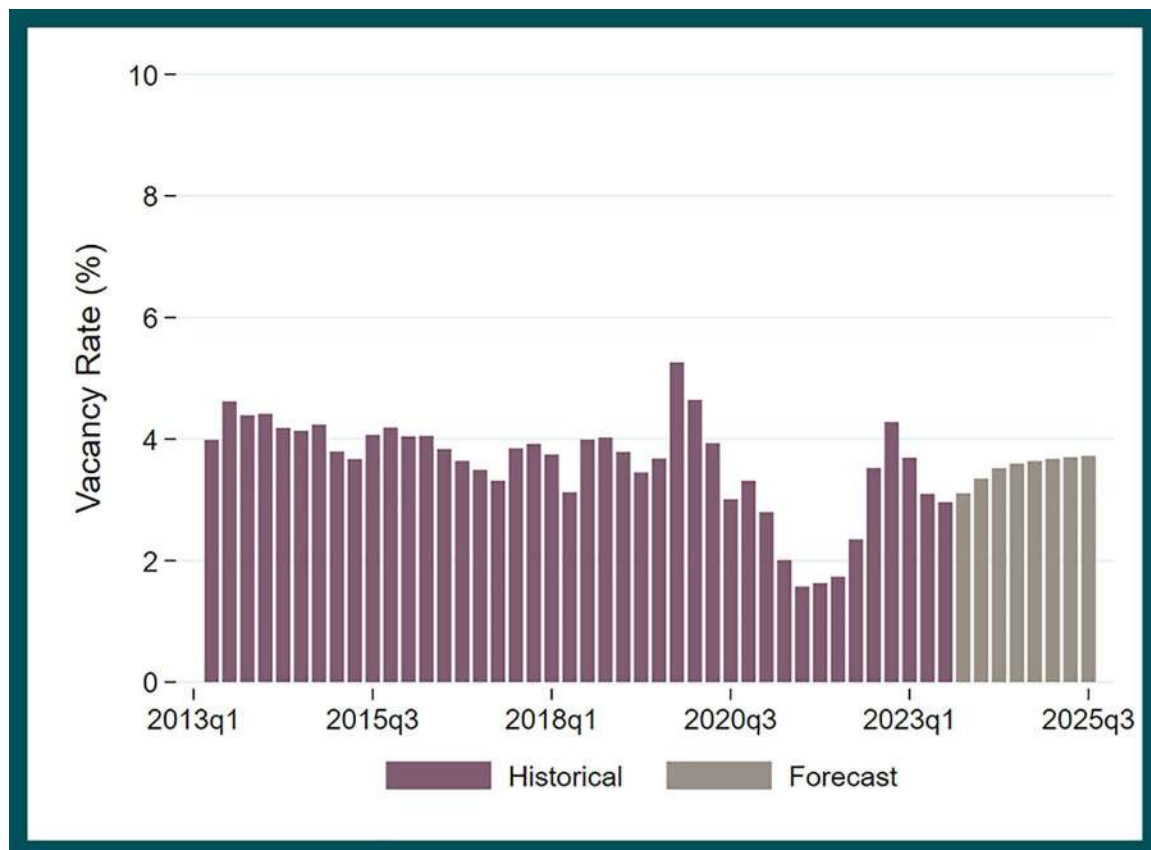
	ALL	RENTERS
RACE		
white only(%)	17.36	12.63
black only(%)	6.79	8.15
asian only(%)	13.96	9.06
hispanic(%)	57.37	67.29
other race(%)	4.52	2.87
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	13.32	15.90
highschool diploma, 18 yrs or more(%)	21.66	24.47
some college education, 18 yrs or more(%)	24.53	21.18
bachelors degree, 18 yrs or more(%)	13.02	8.24
more than bachelors degree, 18 yrs or more(%)	5.01	2.85
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		38.02
renter households living in 2-4 unit housing(%)		15.25
renter households living in 5-9 unit housing(%)		10.69
renter households living in 10-19 unit housing(%)		11.61
renter households living in 20+ unit housing(%)		22.34
renter households living in other types of housing(%)		2.09
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		32.42
renter households living in a structure built between 1970 and 1999(%)		50.55
renter households living in a structure built between 2000 and 2009(%)		8.78
renter households living in a structure built between 2010 and 2019(%)		7.68
renter households living in a structure built in 2020 and 2021(%)		0.57
HOUSEHOLD STATISTICS		
share of renter households(%)	44.43	
share of renter households living in multifamily structure(%)		44.64
share of rent-burdened households(%)		58.95
share of households with children(%)	53.41	54.12
average household size	3.34	3.19
median household income	\$77,245	\$56,646
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.31	87.14
population who moved within CA last year(%)	7.09	9.68
population who moved from other states to CA last year(%)	0.75	0.89
population who moved from abroad last year(%)	0.65	0.71

Source: 2021 1-Year American Community Survey

Chula Vista-National City Market · Asking Rents · Rent Growth · San Diego County, 2013-2025

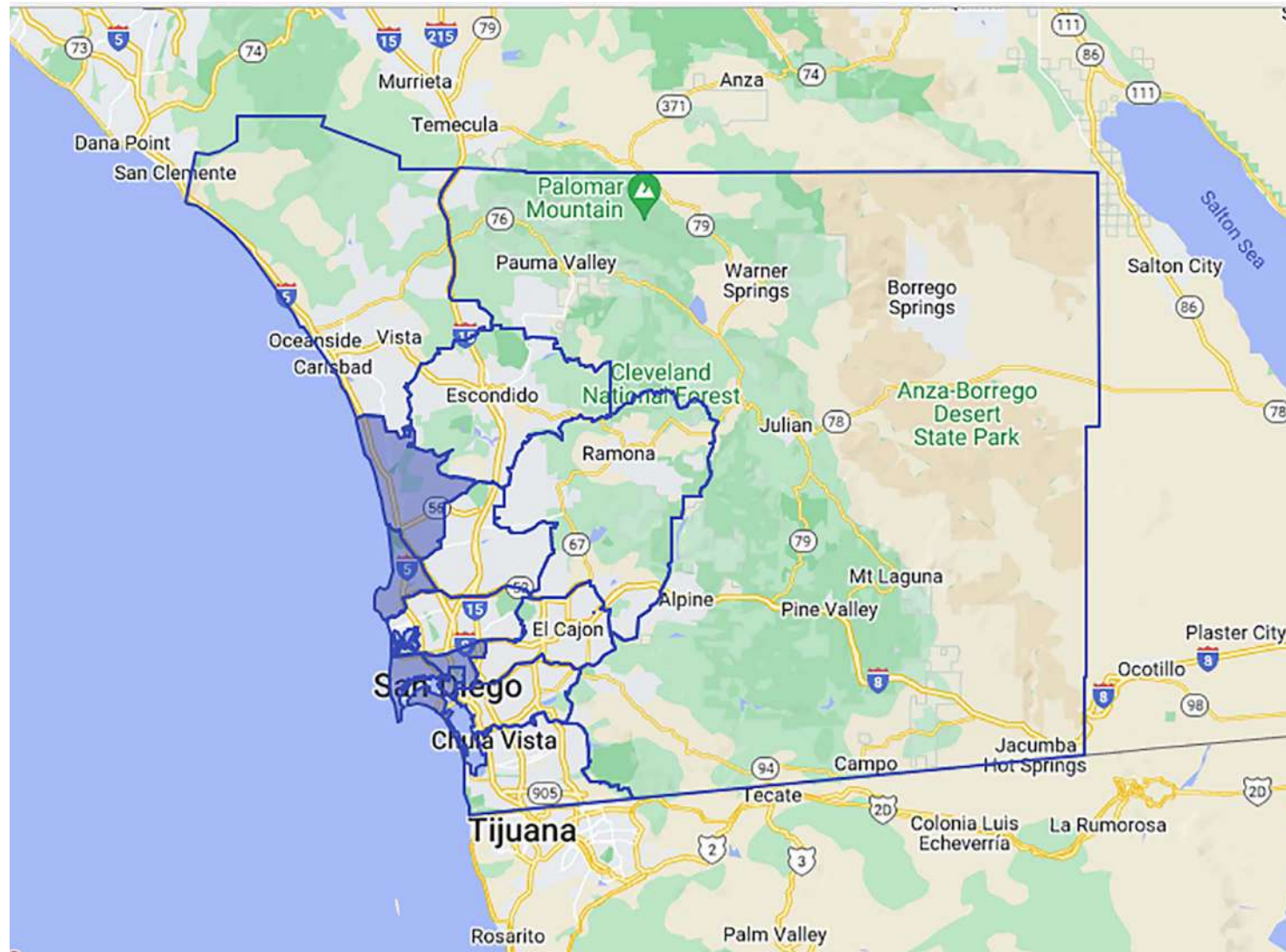


Chula Vista-National City · Vacancy · Delivered Units · San Diego County, 2013-2025



Source: USC Casden forecasts based on CoStar data

City of San Diego - Coastal

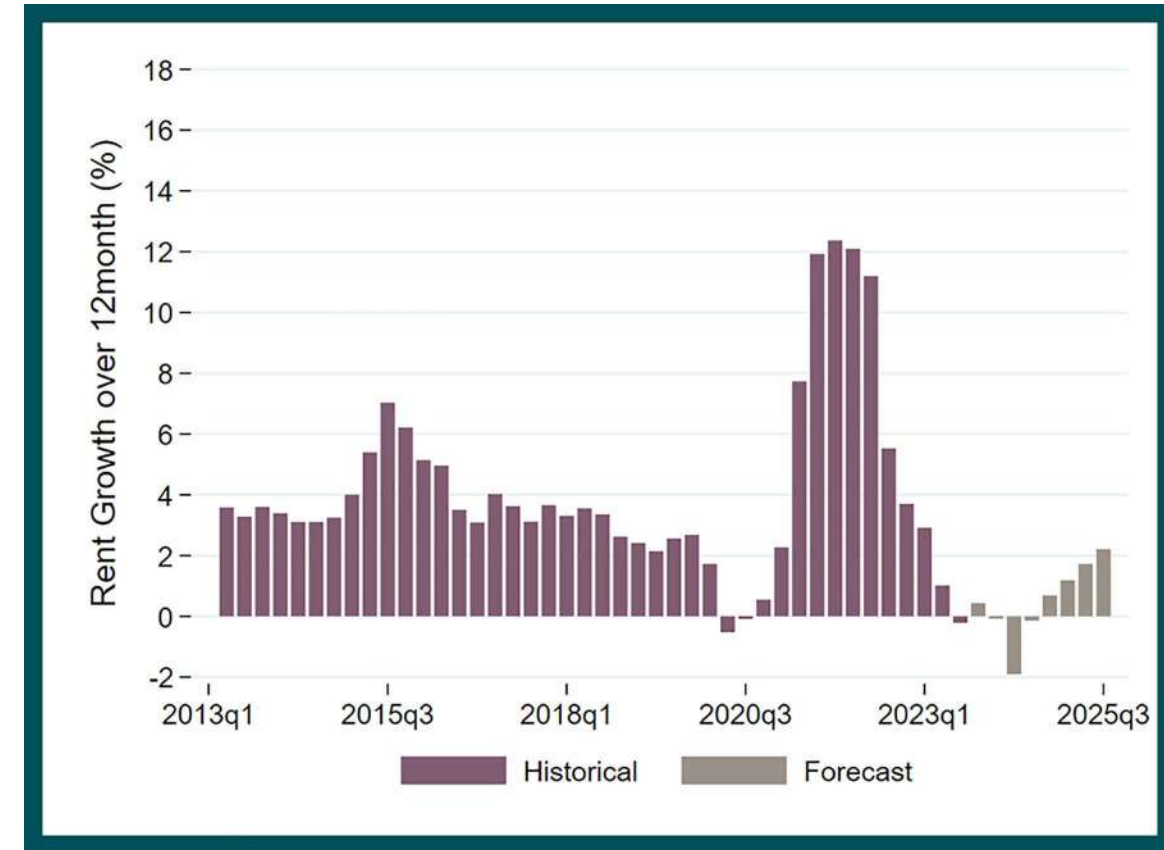
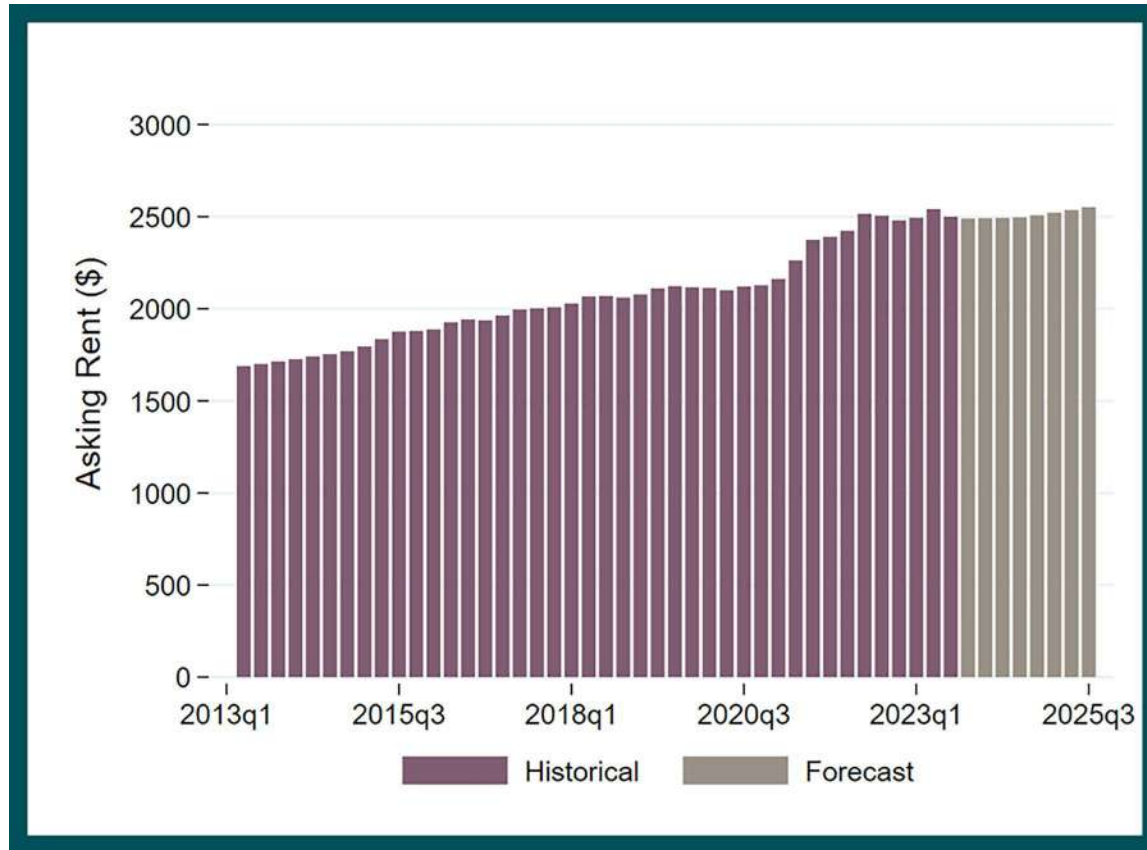


CITY OF SAN DIEGO-COASTAL

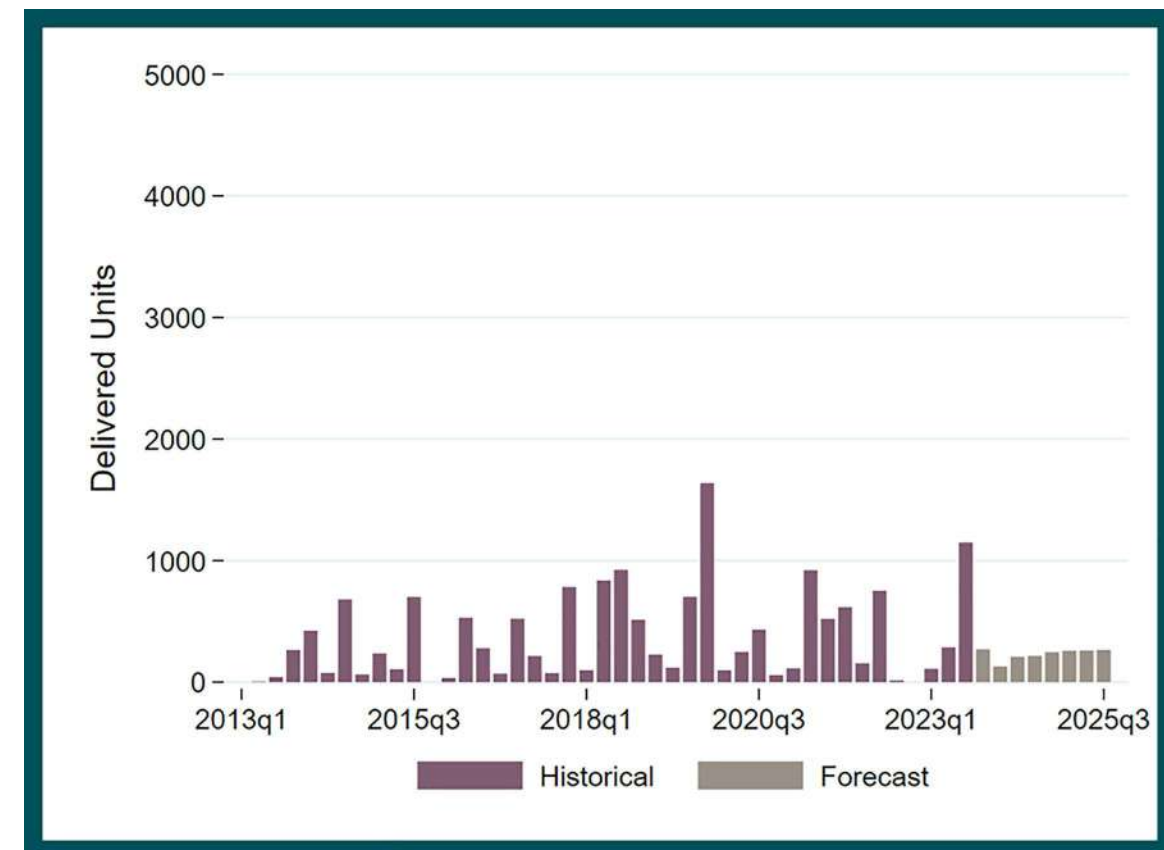
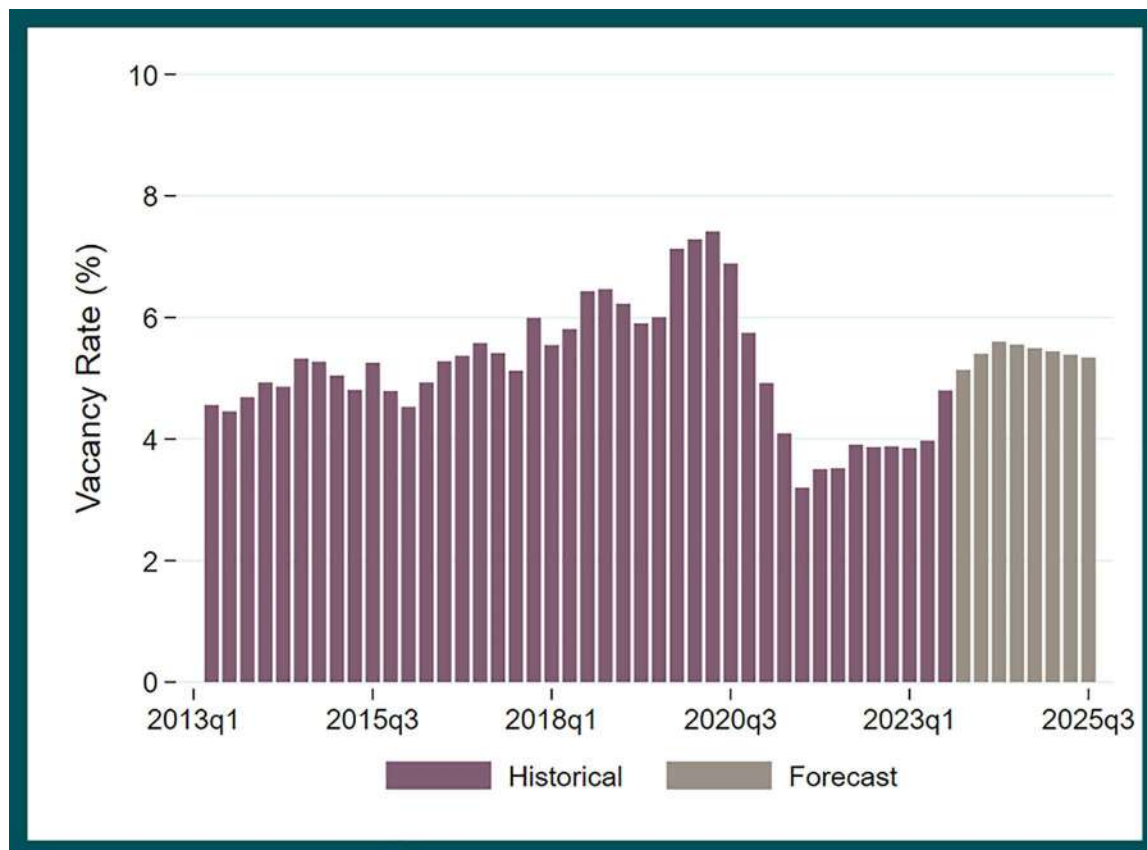
	ALL	RENTERS
RACE		
white only(%)	57.30	52.45
black only(%)	3.35	5.18
asian only(%)	13.15	7.30
hispanic(%)	18.95	27.04
other race(%)	7.25	8.02
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	4.01	5.60
highschool diploma, 18 yrs or more(%)	10.67	11.82
some college education, 18 yrs or more(%)	19.50	22.25
bachelors degree, 18 yrs or more(%)	27.74	29.05
more than bachelors degree, 18 yrs or more(%)	20.31	15.44
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		26.22
renter households living in 2-4 unit housing(%)		13.75
renter households living in 5-9 unit housing(%)		16.84
renter households living in 10-19 unit housing(%)		12.81
renter households living in 20+ unit housing(%)		29.99
renter households living in other types of housing(%)		0.38
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		34.12
renter households living in a structure built between 1970 and 1999(%)		45.31
renter households living in a structure built between 2000 and 2009(%)		10.18
renter households living in a structure built between 2010 and 2019(%)		9.45
renter households living in a structure built in 2020 and 2021(%)		0.95
HOUSEHOLD STATISTICS		
share of renter households(%)	50.94	
share of renter households living in multifamily structure(%)		59.65
share of rent-burdened households(%)		48.02
share of households with children(%)	29.38	20.95
average household size	2.42	2.05
median household income	\$108,142	\$81,364
MIGRATION STATISTICS		
population living in the same house for over a year(%)	80.57	72.12
population who moved within CA last year(%)	13.16	18.99
population who moved from other states to CA last year(%)	4.53	6.44
population who moved from abroad last year(%)	0.95	1.48

Source: 2021 1-Year American Community Survey

City of San Diego - Coastal Market · Asking Rents · Rent Growth · San Diego County, 2013-2025

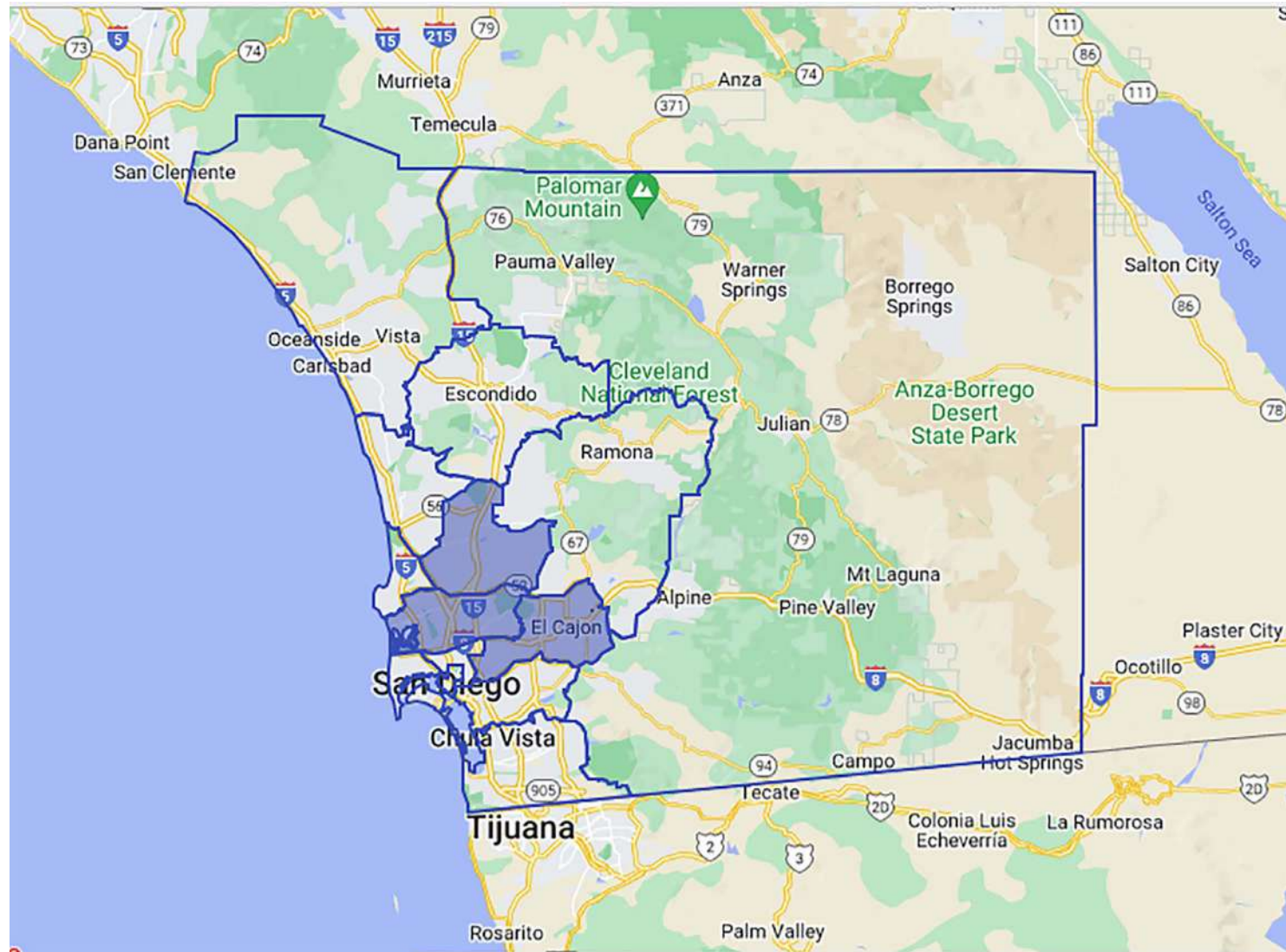


City of San Diego - Coastal Market · Vacancy · Delivered Units · San Diego County, 2013-2025



Source: USC Casden forecasts based on CoStar data

City of San Diego - Inland

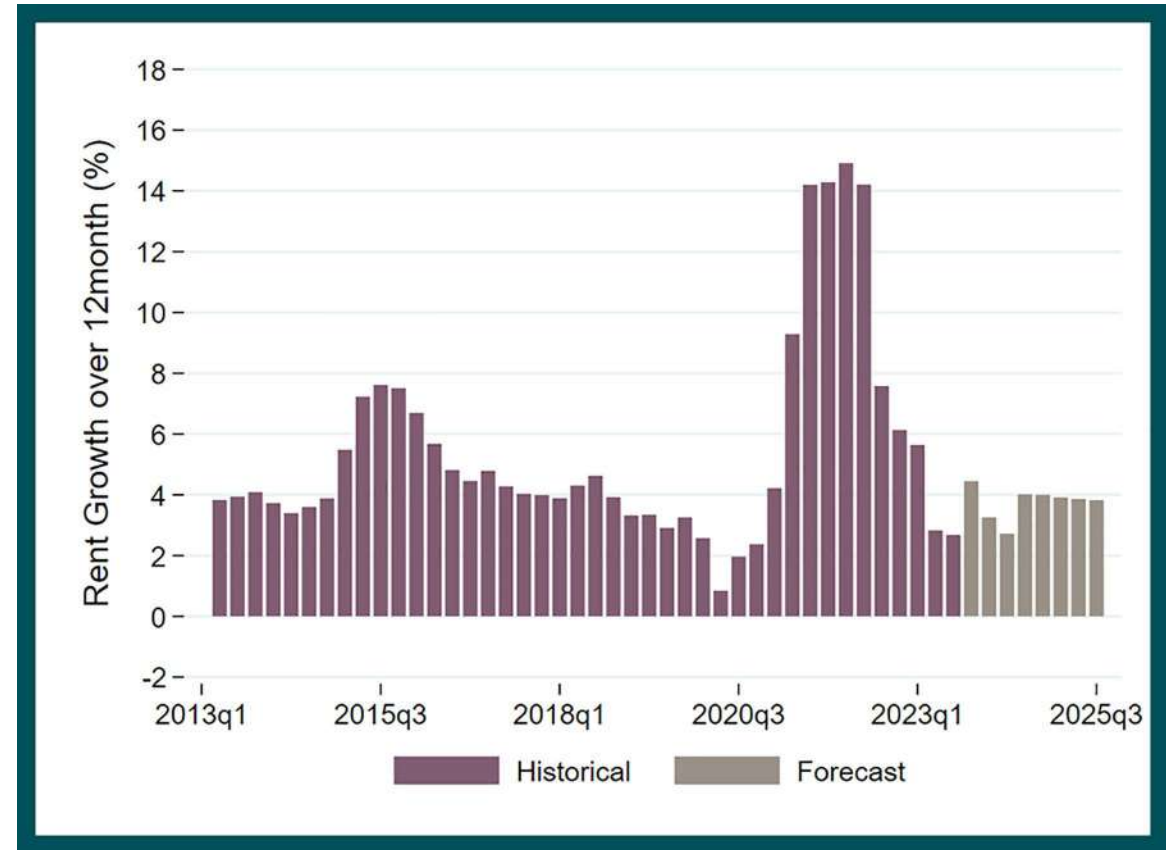
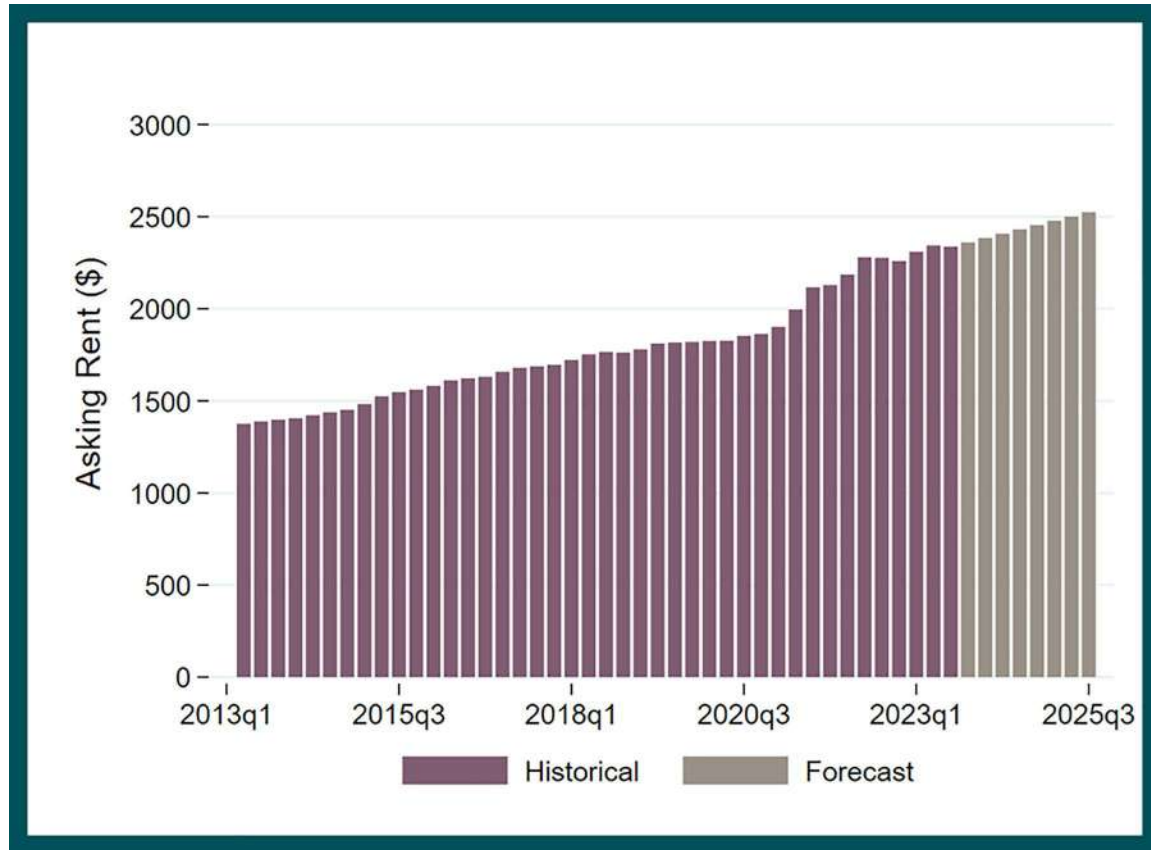


CITY OF SAN DIEGO-INLAND

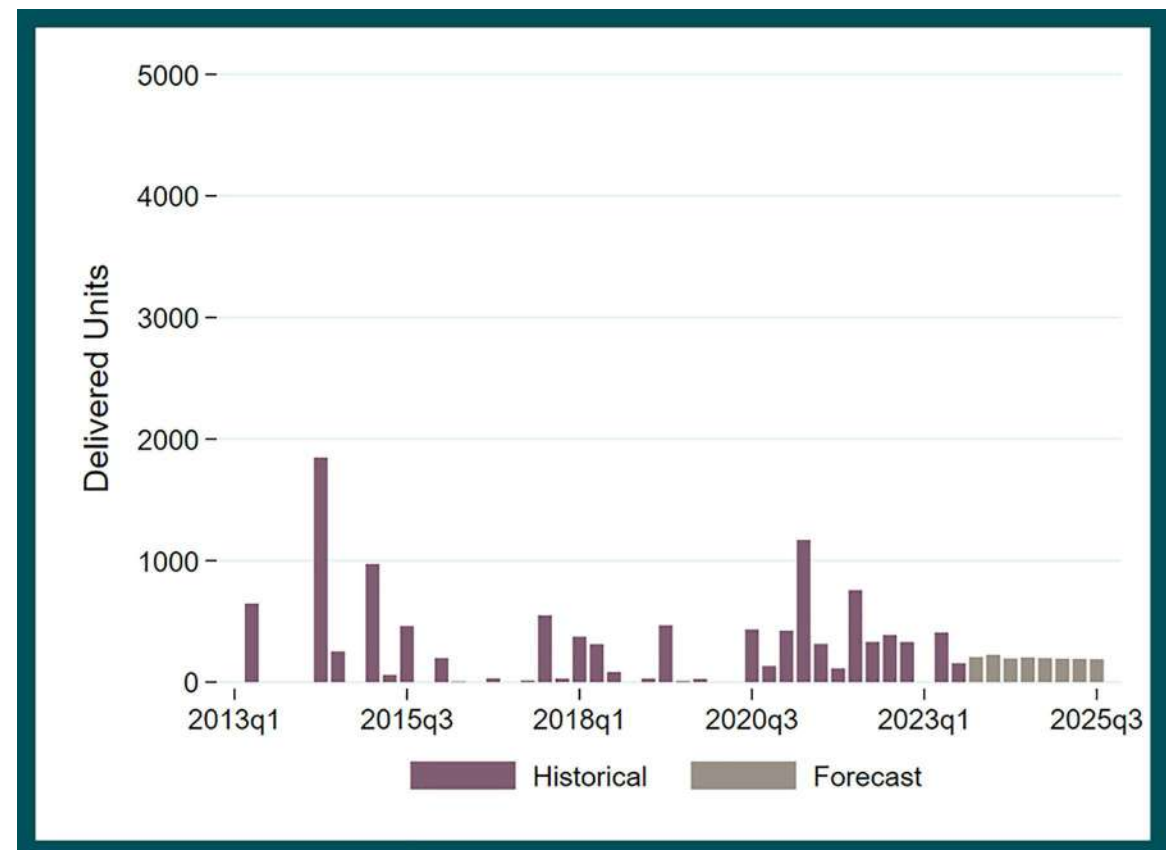
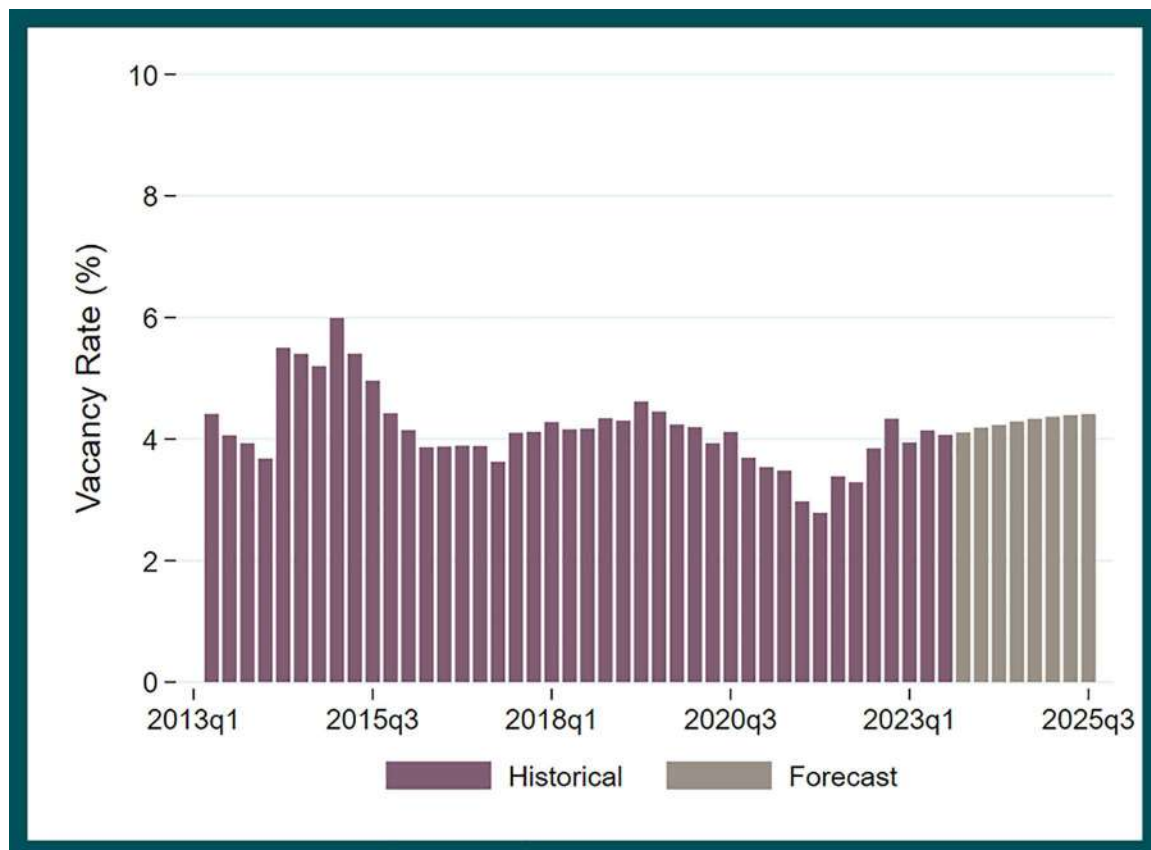
	ALL	RENTERS
RACE		
white only(%)	46.01	35.64
black only(%)	5.58	7.83
asian only(%)	14.52	14.50
hispanic(%)	27.01	34.69
other race(%)	6.87	7.33
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	7.76	9.78
highschool diploma, 18 yrs or more(%)	15.30	15.05
some college education, 18 yrs or more(%)	24.70	25.41
bachelors degree, 18 yrs or more(%)	20.13	18.08
more than bachelors degree, 18 yrs or more(%)	11.83	8.80
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		27.19
renter households living in 2-4 unit housing(%)		10.11
renter households living in 5-9 unit housing(%)		11.76
renter households living in 10-19 unit housing(%)		11.22
renter households living in 20+ unit housing(%)		38.54
renter households living in other types of housing(%)		1.17
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		30.24
renter households living in a structure built between 1970 and 1999(%)		50.83
renter households living in a structure built between 2000 and 2009(%)		10.37
renter households living in a structure built between 2010 and 2019(%)		8.40
renter households living in a structure built in 2020 and 2021(%)		0.17
HOUSEHOLD STATISTICS		
share of renter households(%)	51.37	
share of renter households living in multifamily structure(%)		61.53
share of rent-burdened households(%)		55.17
share of households with children(%)	37.66	37.53
average household size	2.71	2.62
median household income	\$84,866	\$65,915
MIGRATION STATISTICS		
population living in the same house for over a year(%)	83.90	78.56
population who moved within CA last year(%)	11.70	16.03
population who moved from other states to CA last year(%)	2.43	3.05
population who moved from abroad last year(%)	0.81	0.98

Source: 2021 1-Year American Community Survey

City of San Diego - Inland Market · Asking Rents · Rent Growth · San Diego County, 2013-2025

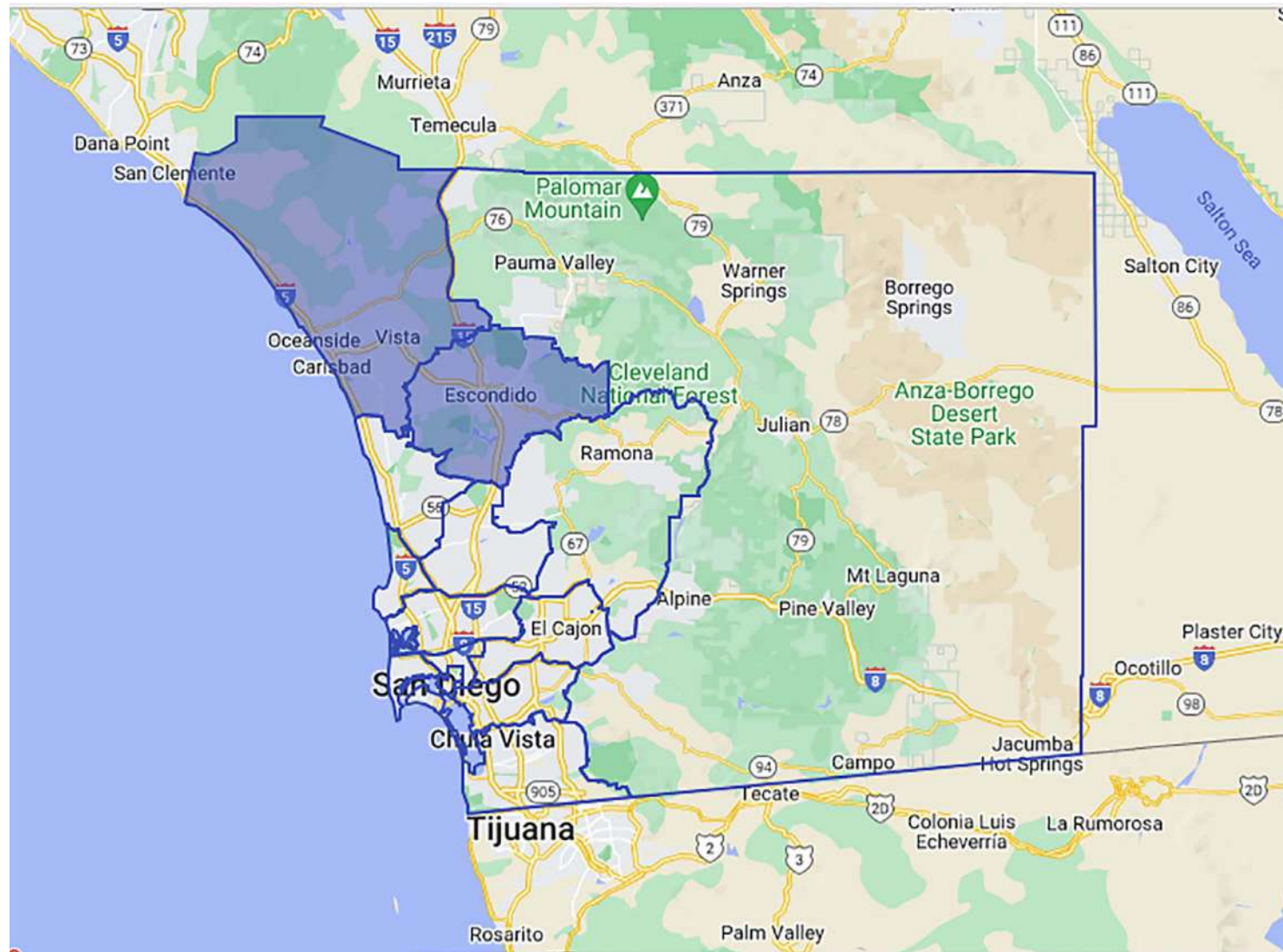


City of San Diego · Vacancy · Delivered Units · San Diego County, 2013-2025



Source: USC Casden forecasts based on CoStar data

North City

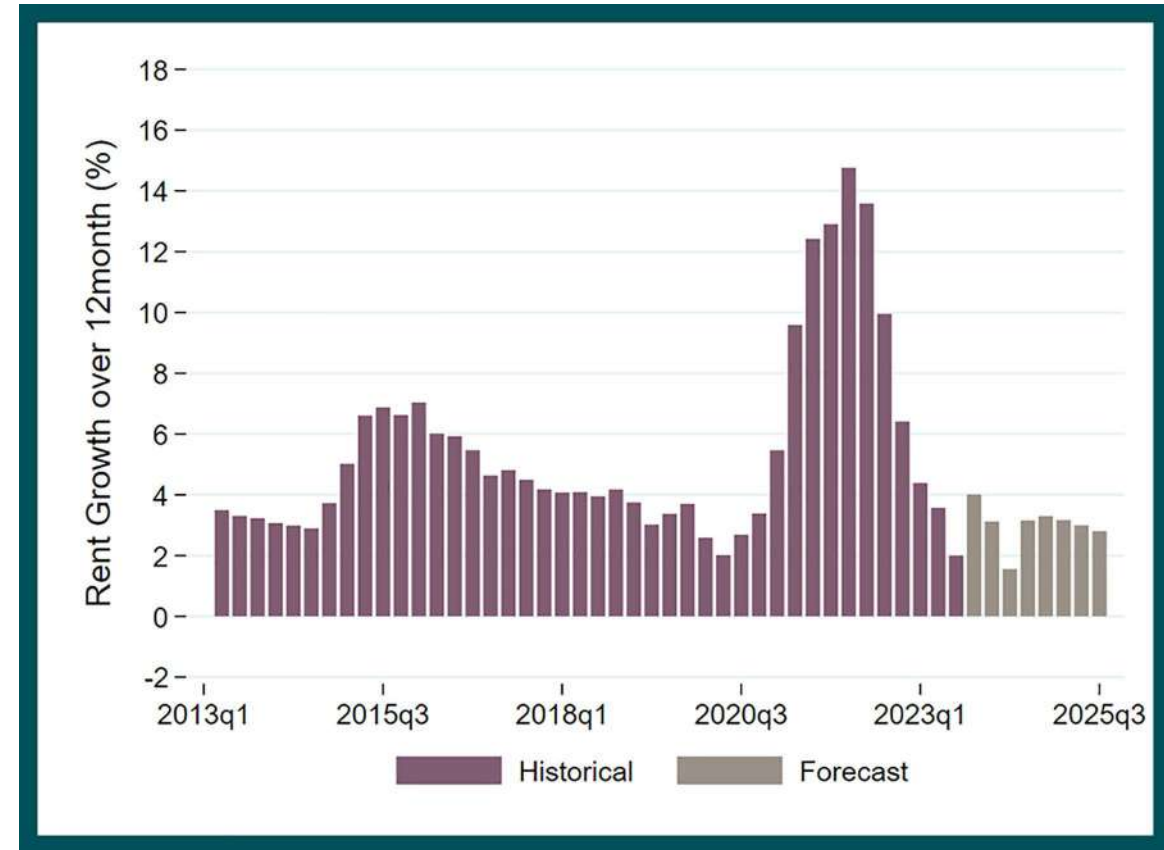
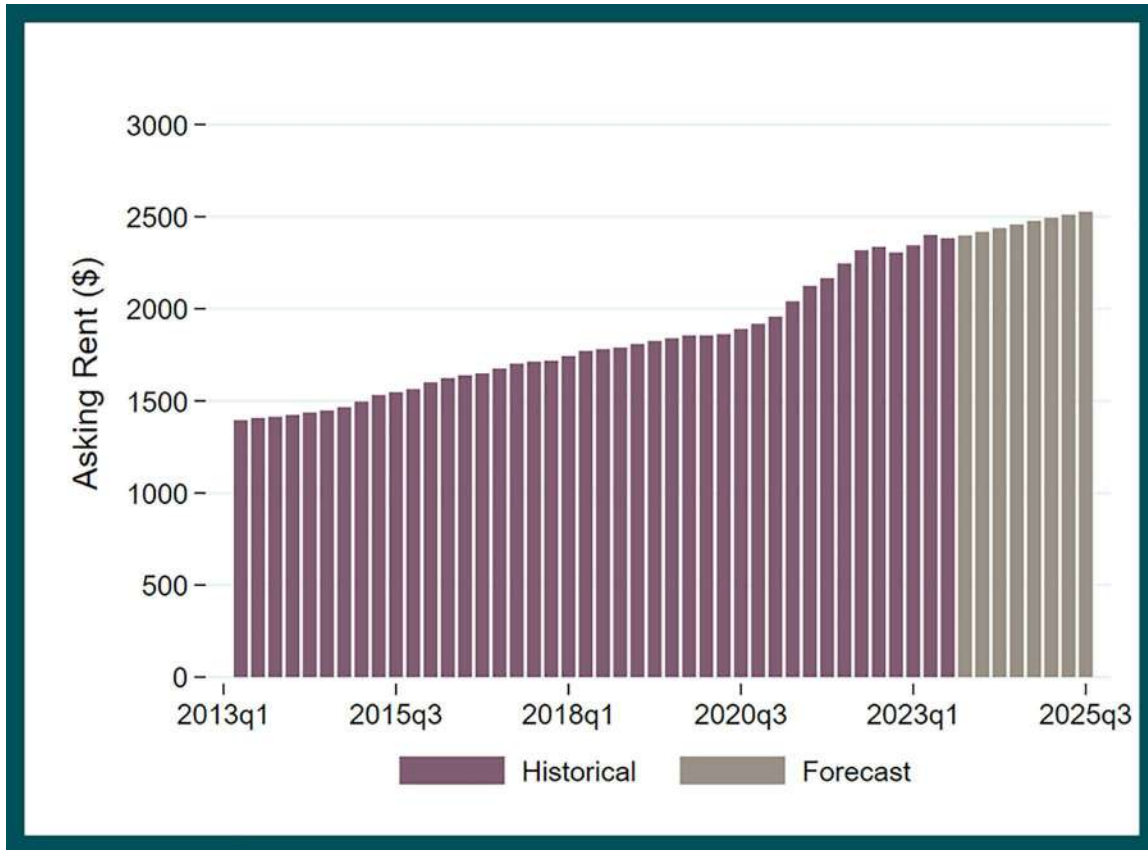


NORTH CITY

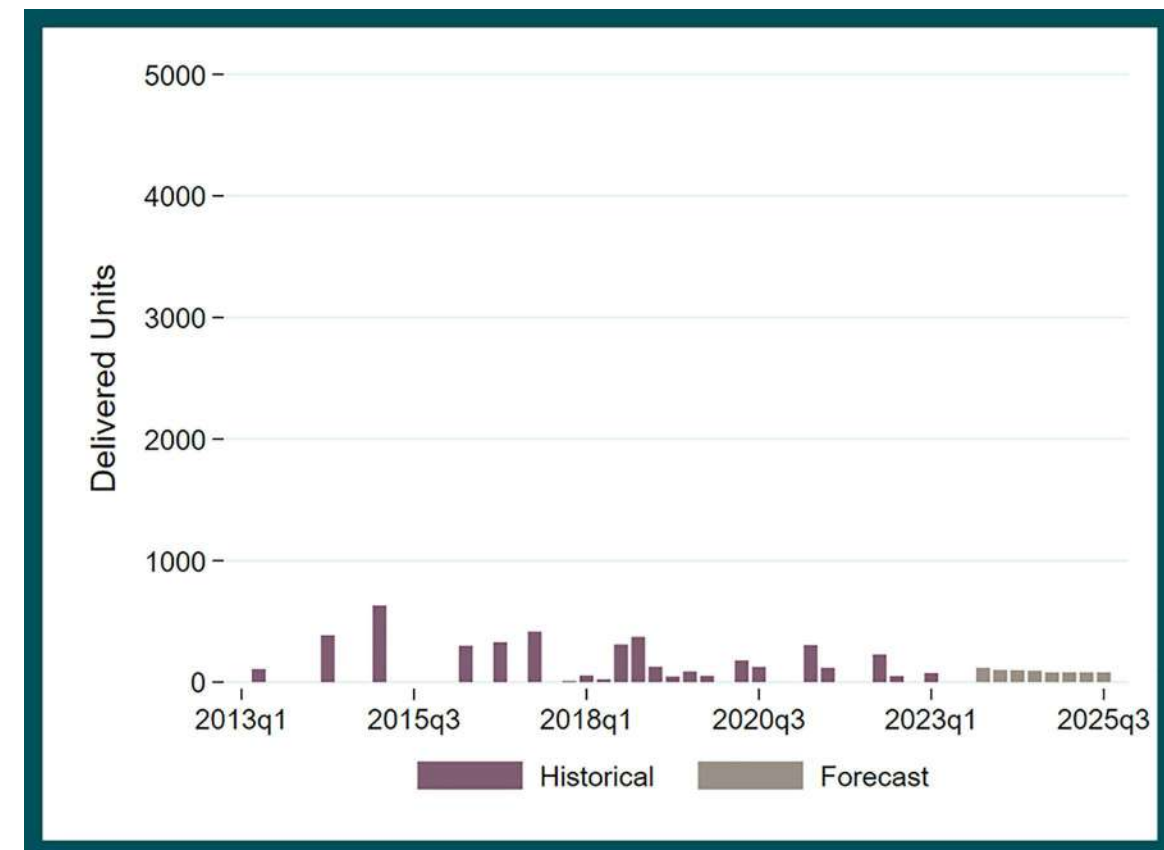
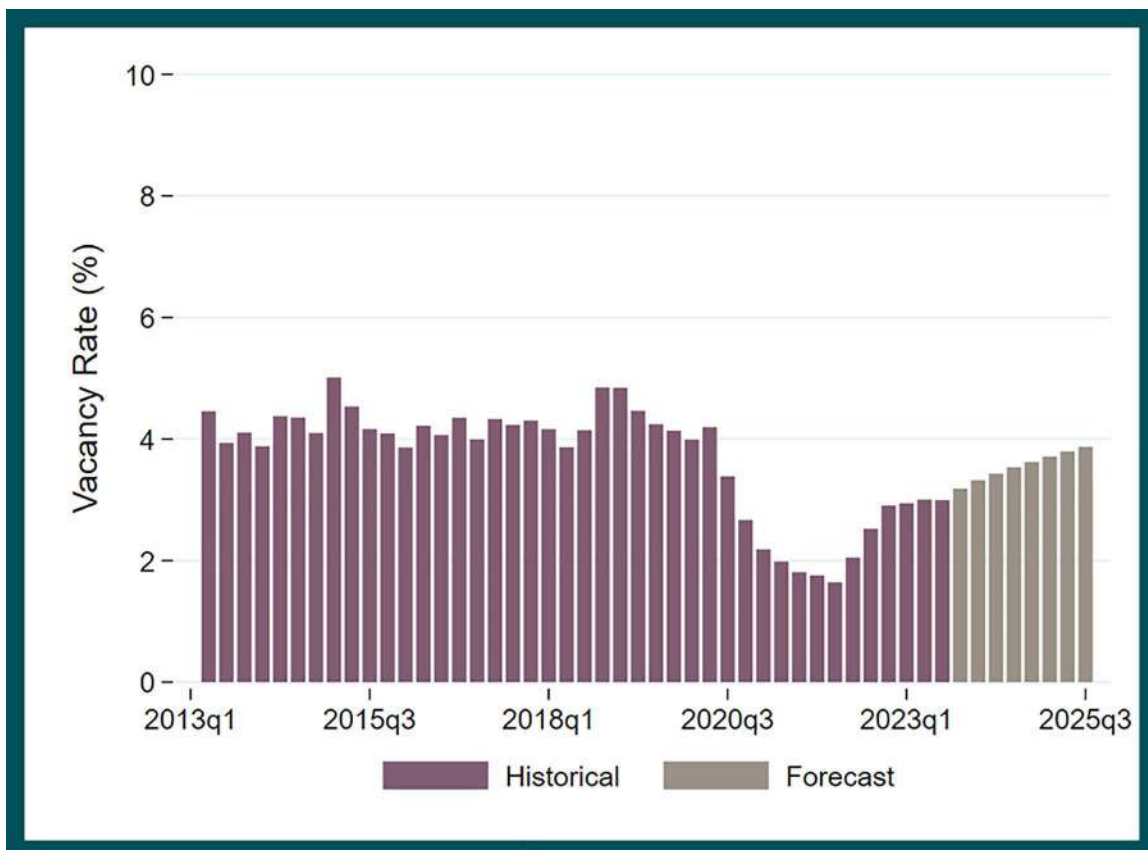
	ALL	RENTERS
RACE		
white only(%)	44.05	31.26
black only(%)	2.76	3.78
asian only(%)	7.55	3.93
hispanic(%)	39.75	56.28
other race(%)	5.88	4.76
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	9.81	14.02
highschool diploma, 18 yrs or more(%)	16.19	16.59
some college education, 18 yrs or more(%)	24.21	23.47
bachelors degree, 18 yrs or more(%)	16.51	11.34
more than bachelors degree, 18 yrs or more(%)	10.39	6.84
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		35.75
renter households living in 2-4 unit housing(%)		13.08
renter households living in 5-9 unit housing(%)		9.79
renter households living in 10-19 unit housing(%)		14.27
renter households living in 20+ unit housing(%)		23.40
renter households living in other types of housing(%)		3.72
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		18.90
renter households living in a structure built between 1970 and 1999(%)		58.20
renter households living in a structure built between 2000 and 2009(%)		12.05
renter households living in a structure built between 2010 and 2019(%)		9.93
renter households living in a structure built in 2020 and 2021(%)		0.92
HOUSEHOLD STATISTICS		
share of renter households(%)	43.21	
share of renter households living in multifamily structure(%)		47.45
share of rent-burdened households(%)		61.75
share of households with children(%)	41.15	41.69
average household size	2.94	2.90
median household income	\$87,544	\$62,311
MIGRATION STATISTICS		
population living in the same house for over a year(%)	84.60	79.19
population who moved within CA last year(%)	10.26	13.27
population who moved from other states to CA last year(%)	3.03	4.65
population who moved from abroad last year(%)	1.14	1.72

Source: 2021 1-Year American Community Survey

North City · Asking Rents · Rent Growth · San Diego County, 2013-2025

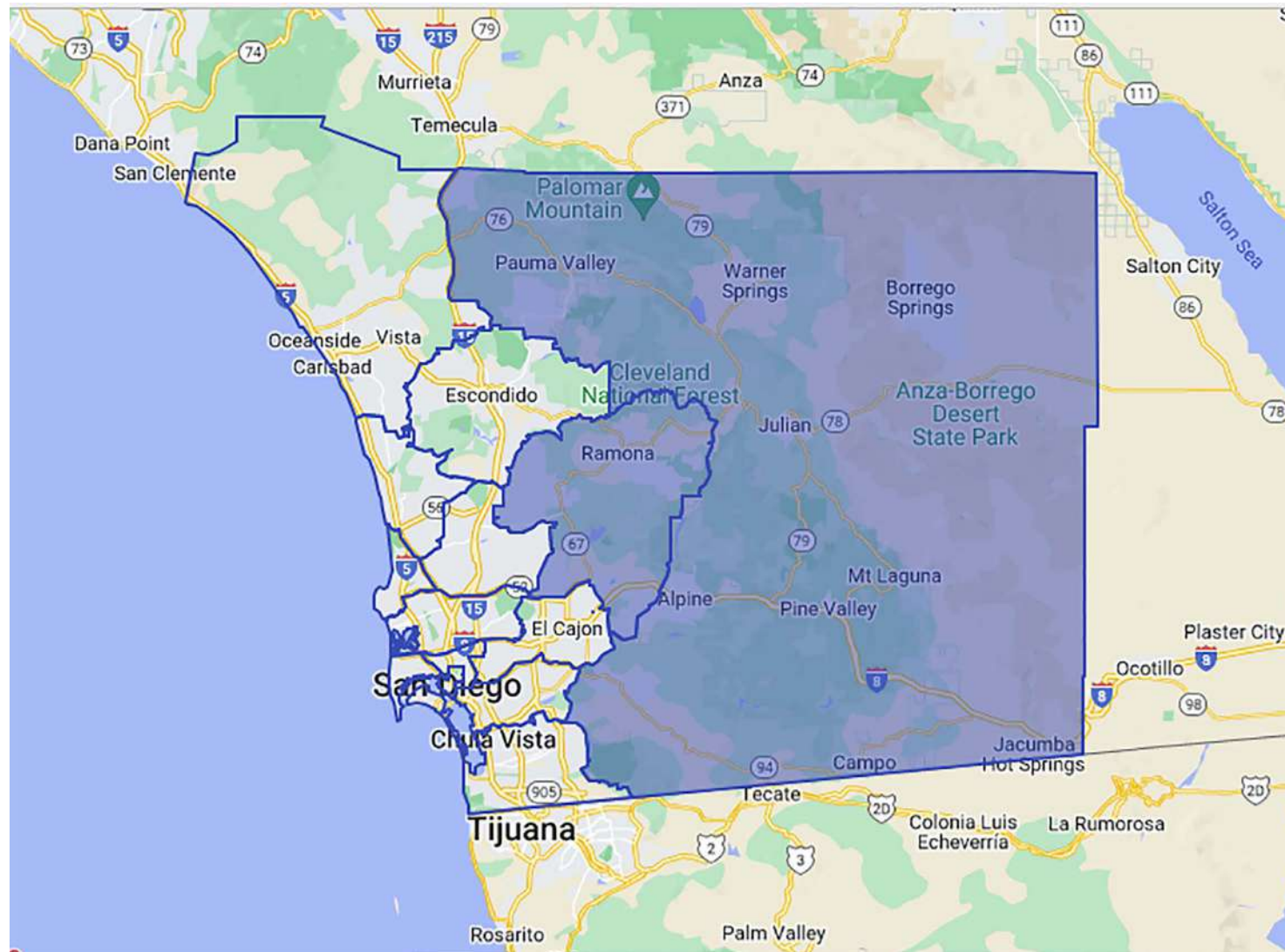


North City · Vacancy · Delivered Units · San Diego County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Ramona-Outlying San Diego

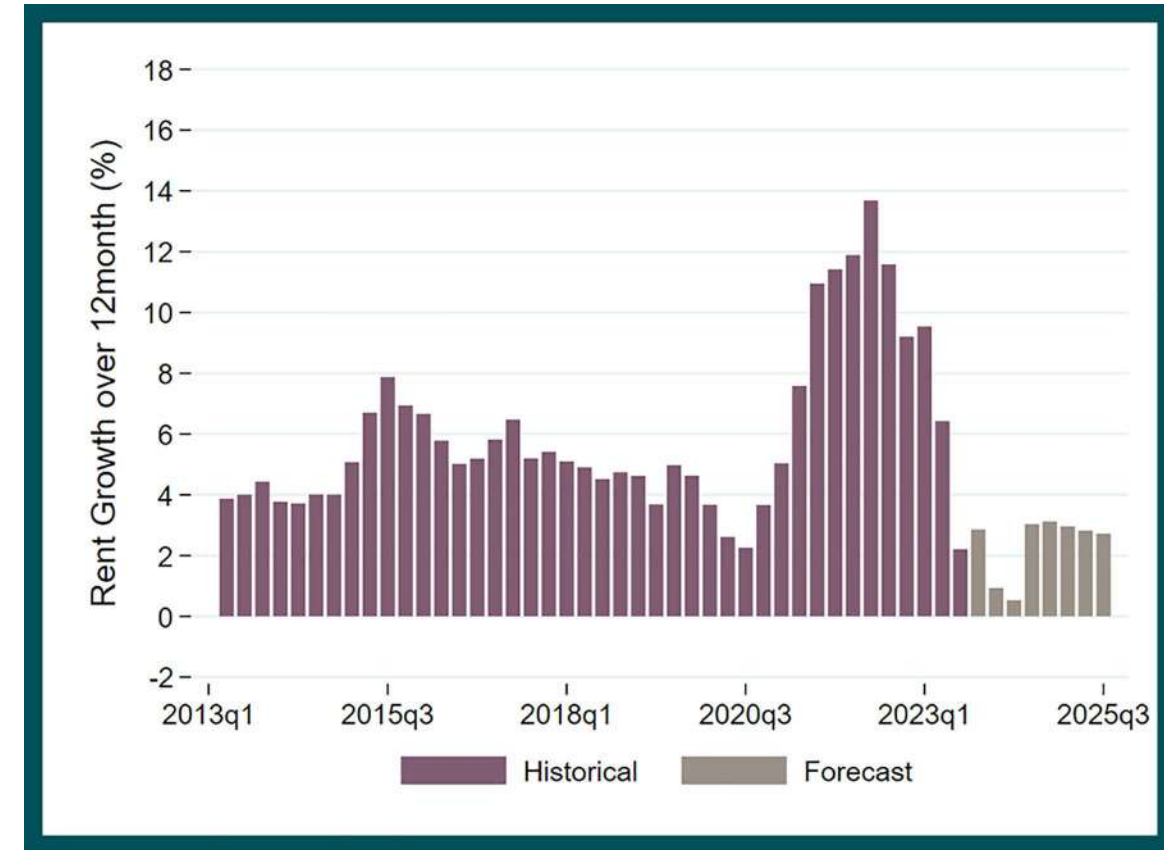
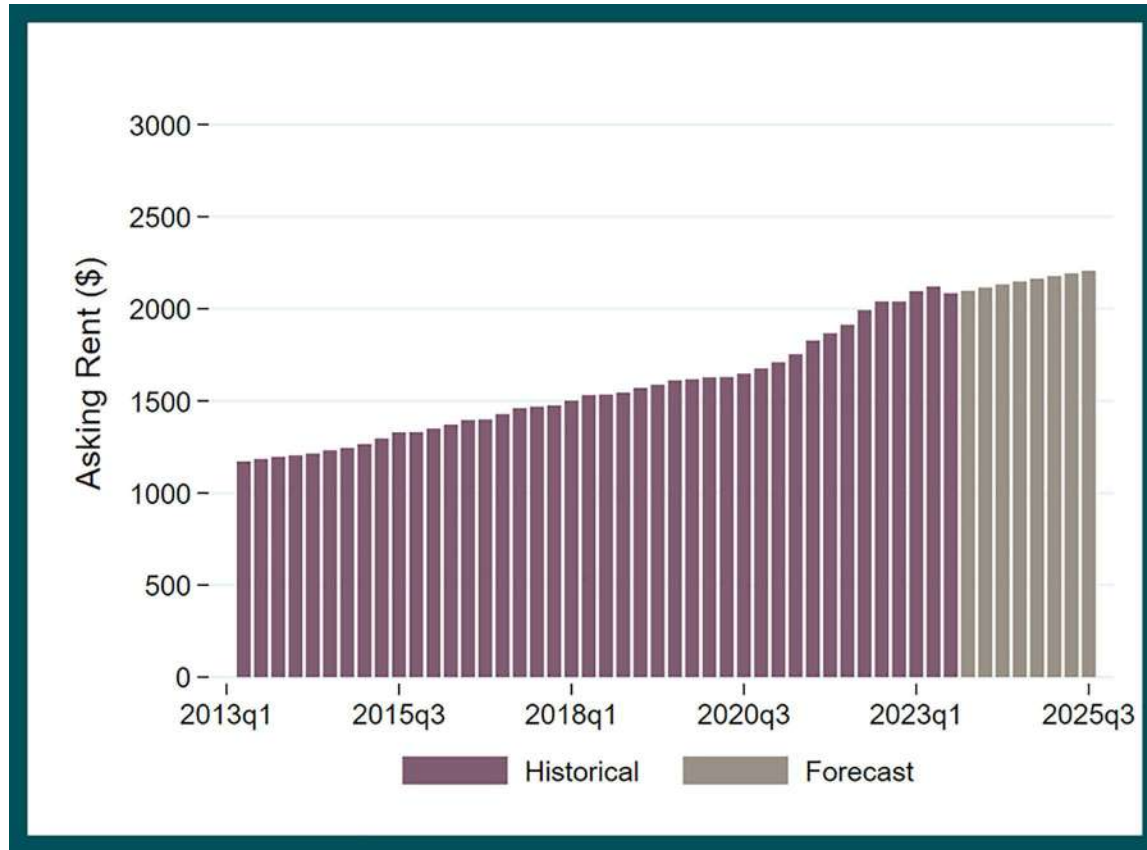


RAMONA-OUTLYING SAN DIEGO

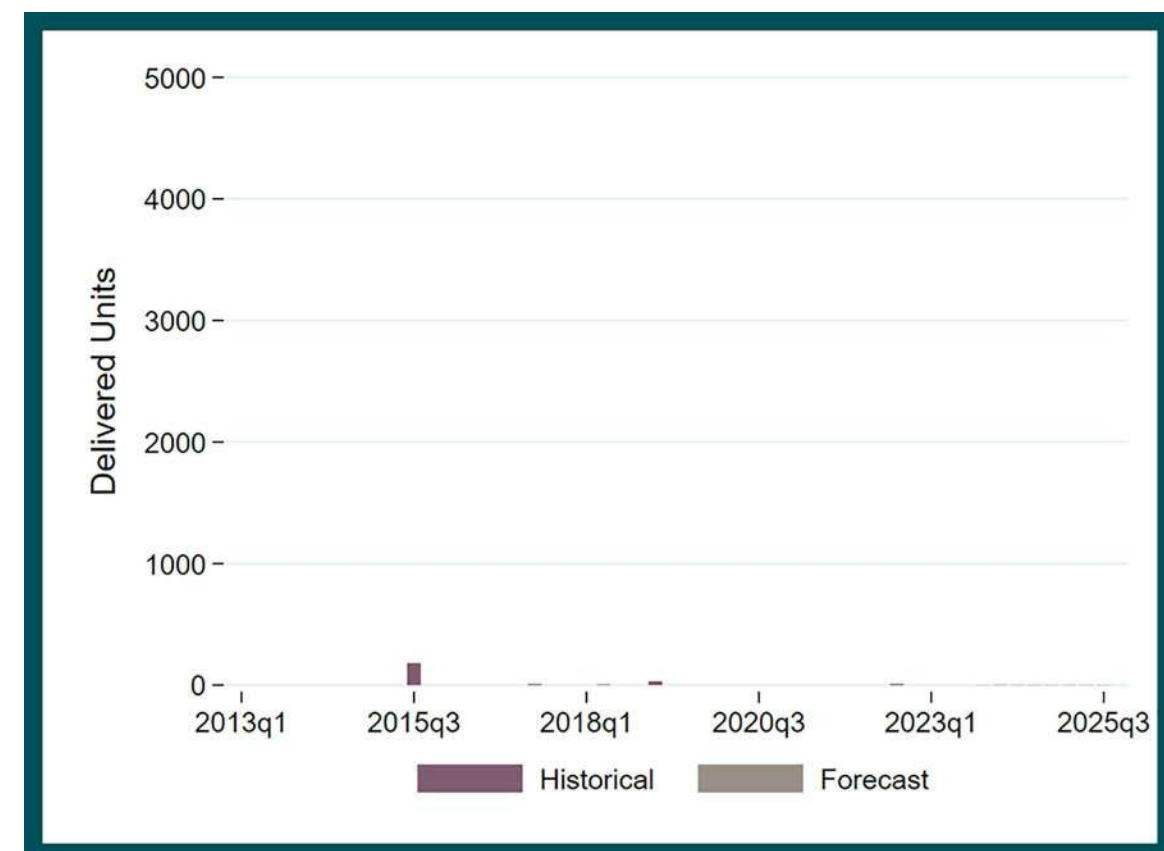
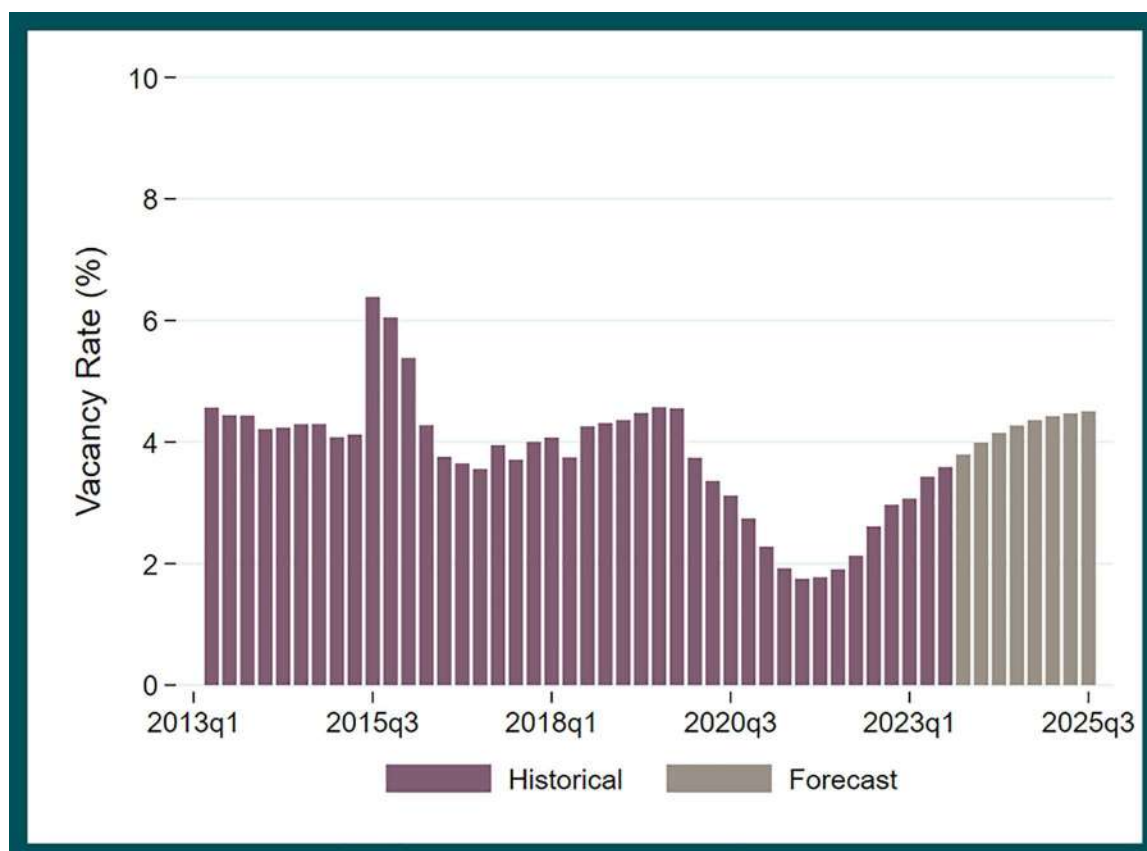
	ALL	RENTERS
RACE		
white only(%)	59.30	48.35
black only(%)	1.44	2.03
asian only(%)	9.00	7.02
hispanic(%)	23.57	36.68
other race(%)	6.69	5.91
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	6.06	7.62
highschool diploma, 18 yrs or more(%)	16.64	20.49
some college education, 18 yrs or more(%)	24.57	22.42
bachelors degree, 18 yrs or more(%)	18.30	11.91
more than bachelors degree, 18 yrs or more(%)	10.99	7.66
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		37.56
renter households living in 2-4 unit housing(%)		12.48
renter households living in 5-9 unit housing(%)		13.70
renter households living in 10-19 unit housing(%)		10.88
renter households living in 20+ unit housing(%)		21.19
renter households living in other types of housing(%)		4.19
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		19.22
renter households living in a structure built between 1970 and 1999(%)		61.77
renter households living in a structure built between 2000 and 2009(%)		12.32
renter households living in a structure built between 2010 and 2019(%)		5.57
renter households living in a structure built in 2020 and 2021(%)		1.13
HOUSEHOLD STATISTICS		
share of renter households(%)	24.95	
share of renter households living in multifamily structure(%)		45.77
share of rent-burdened households(%)		56.92
share of households with children(%)	40.08	47.28
average household size	2.82	2.92
median household income	\$102,993	\$59,736
MIGRATION STATISTICS		
population living in the same house for over a year(%)	85.71	80.92
population who moved within CA last year(%)	11.45	14.20
population who moved from other states to CA last year(%)	1.43	2.48
population who moved from abroad last year(%)	0.27	0.67

Source: 2021 1-Year American Community Survey

Ramona-Outlying San Diego · Asking Rents · Rent Growth · San Diego County, 2013-2025



Ramona-Outlying San Diego · Vacancy · Delivered Units · San Diego County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Ventura



Ventura County

	ALL	RENTERS
RACE		
white only(%)	42.52	30.06
black only(%)	1.63	1.82
asian only(%)	7.47	5.03
hispanic(%)	44.05	58.67
other race(%)	4.34	4.42
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	12.06	17.07
highschool diploma, 18 yrs or more(%)	15.84	17.78
some college education, 18 yrs or more(%)	24.78	21.73
bachelors degree, 18 yrs or more(%)	15.63	11.23
more than bachelors degree, 18 yrs or more(%)	9.52	4.69
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		46.42
renter households living in 2-4 unit housing(%)		12.35
renter households living in 5-9 unit housing(%)		10.3
renter households living in 10-19 unit housing(%)		9.2
renter households living in 20+ unit housing(%)		18.97
renter households living in other types of housing(%)		2.75
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		31.89
renter households living in a structure built between 1970 and 1999(%)		49.37
renter households living in a structure built between 2000 and 2009(%)		12.36
renter households living in a structure built between 2010 and 2019(%)		6.32
renter households living in a structure built in 2020 and 2021(%)		0.06
HOUSEHOLD STATISTICS		
share of renter households(%)	34.77	
share of renter households living in multifamily structure(%)		38.47
share of rent-burdened households(%)		52.76
share of households with children(%)	43.48	45.03
average household size	3.01	2.97
median household income	\$97,534	\$67,460
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.49	88.64
population who moved within CA last year(%)	7.59	9.00
population who moved from other states to CA last year(%)	0.5	0.62
population who moved from abroad last year(%)	0.24	0.28

Source: 2021 1-Year American Community Survey

VENTURA COUNTY

In contrast to Orange County, and the other counties covered in the forecast for that matter, Ventura County has a less diversified economy that is dependent largely on natural resources, mining, and agriculture. Its economy is more than seven times as exposed to natural resources and mining than the country as a whole. However, its agricultural sector counterbalances its exposure to natural resources and mining, two very volatile sectors. Given its export-oriented economy, Ventura County has the second highest median household income in Southern California after Orange County. Its median household and renter incomes of \$97,534 and \$67,460, respectively, in 2021 were significantly above the averages of the state of California. The county's unemployment increased from 3.4% one year ago to 4.5% at the end of 2023Q2. Even though this figure is slightly higher than the national average of 3.9%, it is similar to the state unemployment rate.

Ventura County seems content with maintaining low levels of rental housing supply, despite higher rents

Despite its relatively small population size, Ventura County has seen more immigration than the rest of Southern California. Net immigration to Ventura County was 38,100 in 2019 and 14,300 in 2021, representing 4.5% and 1.7% of the population. In comparison, net immigration to the Inland Empire was 1.1% in 2019 and 1.0% in 2021. People moving to Ventura County are more likely to be attracted by job opportunities there than housing because Ventura County is one of the most expensive housing markets.

Housing conditions in Ventura County do not change very much because new supply has remained low over the years. Like the Inland Empire, the Ventura County rental market includes a large share (46%) of single-family rentals. Multifamily development remains sporadic. Only 110 multifamily units were permitted so far this year. This dismal level of development activity representing 0.3% of the existing rental stock will have no significant effect on rent. Gross deliveries averaged 100 units per quarter over the last few years and are expected to stagnate at that level in the next two years. We forecast rent to grow by 3% on average over that period from \$2,507 to \$2,671 with vacancy remaining between 4 and 4.5%. Although Ventura County's forecasted rent growth is higher than the region's average, it will be significantly lower than during the pandemic.

Ventura County seems content with maintaining low levels of rental housing supply, despite higher rents. The sporadic nature of development activity in Ventura County makes accurate forecasting a challenging exercise.

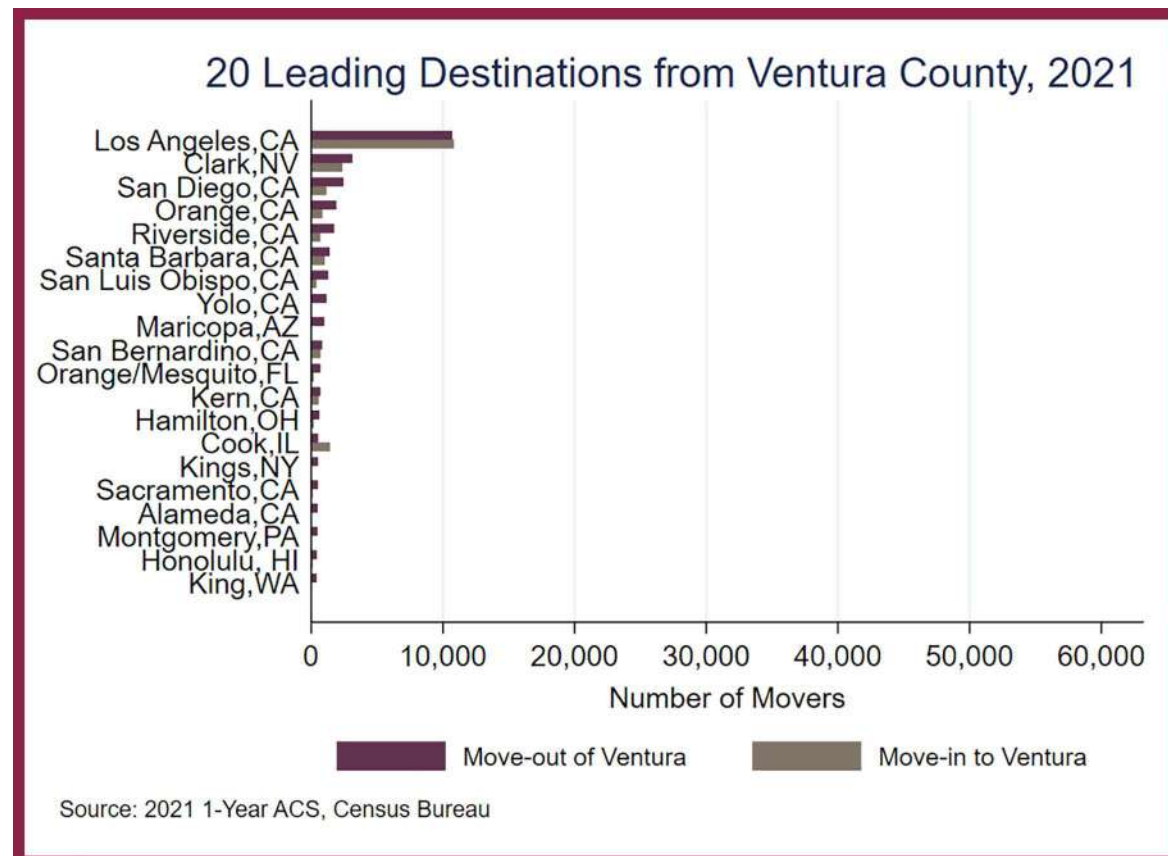
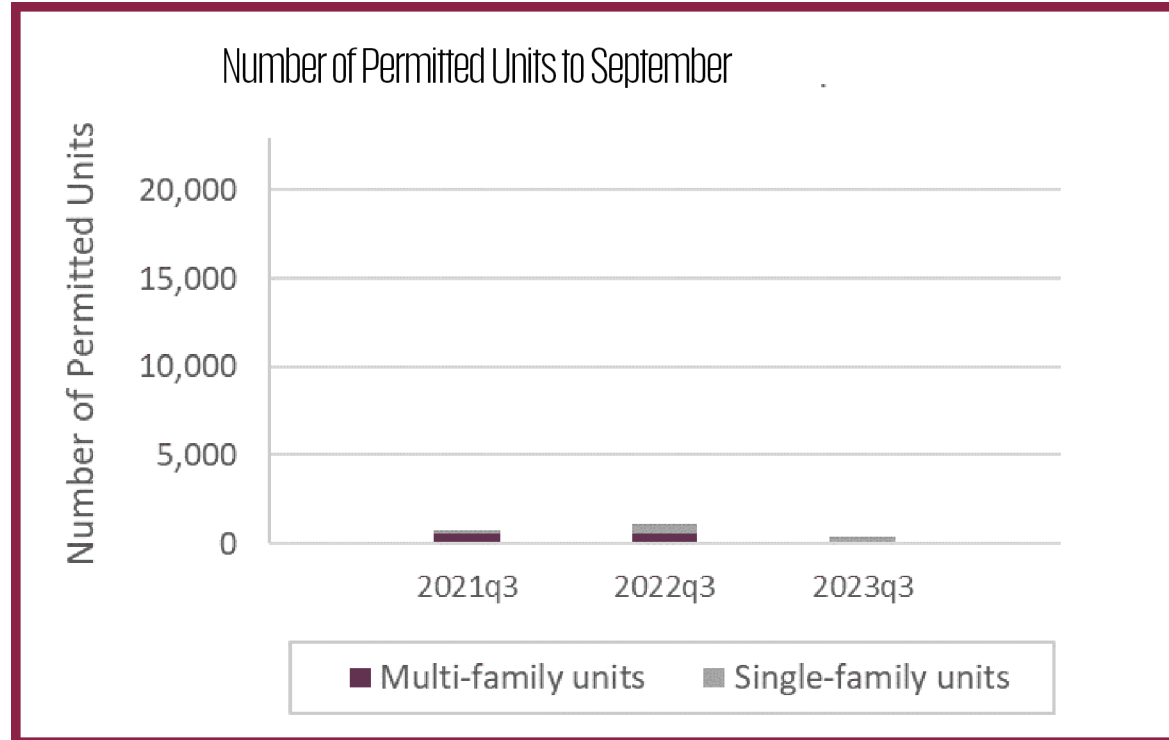
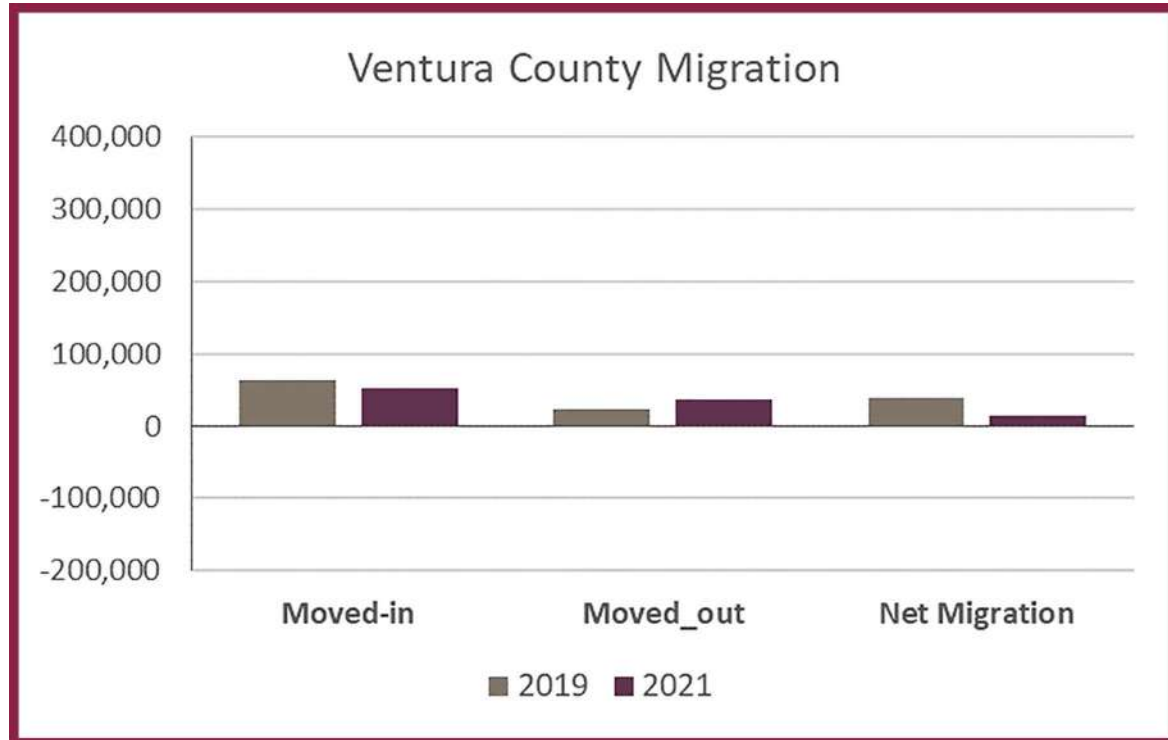
EMPLOYMENT LOCATION QUOTIENTS, 2023 1ST QUARTER

Industry · Ventura County

All industries	1.00
Goods-producing	1.42
Natural resources and mining	6.32
Construction	1.10
Manufacturing	0.96
Service-providing	0.92
Trade, transportation, and utilities	0.92
Information	0.55
Financial activities	0.75
Professional and business services	0.88
Education and health services	0.96
Leisure and hospitality	1.10
Other services	0.87
Unclassified	0.38

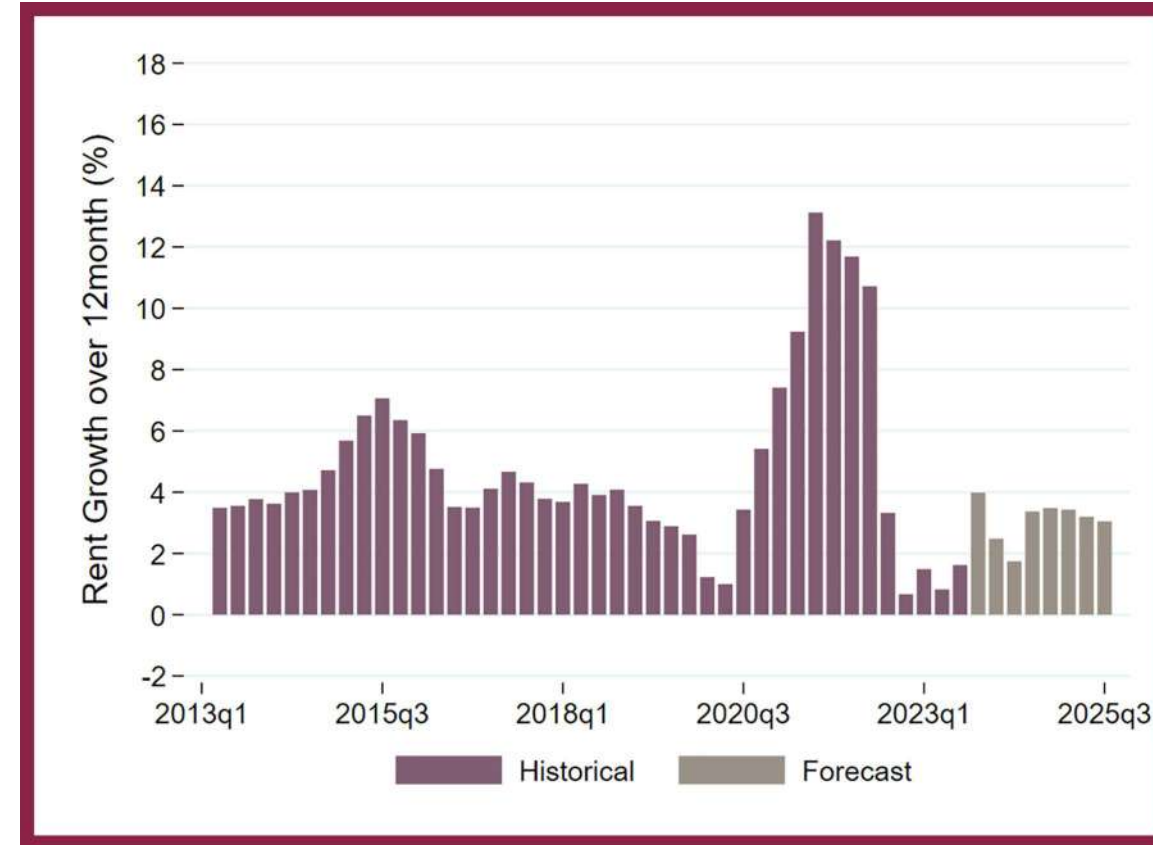
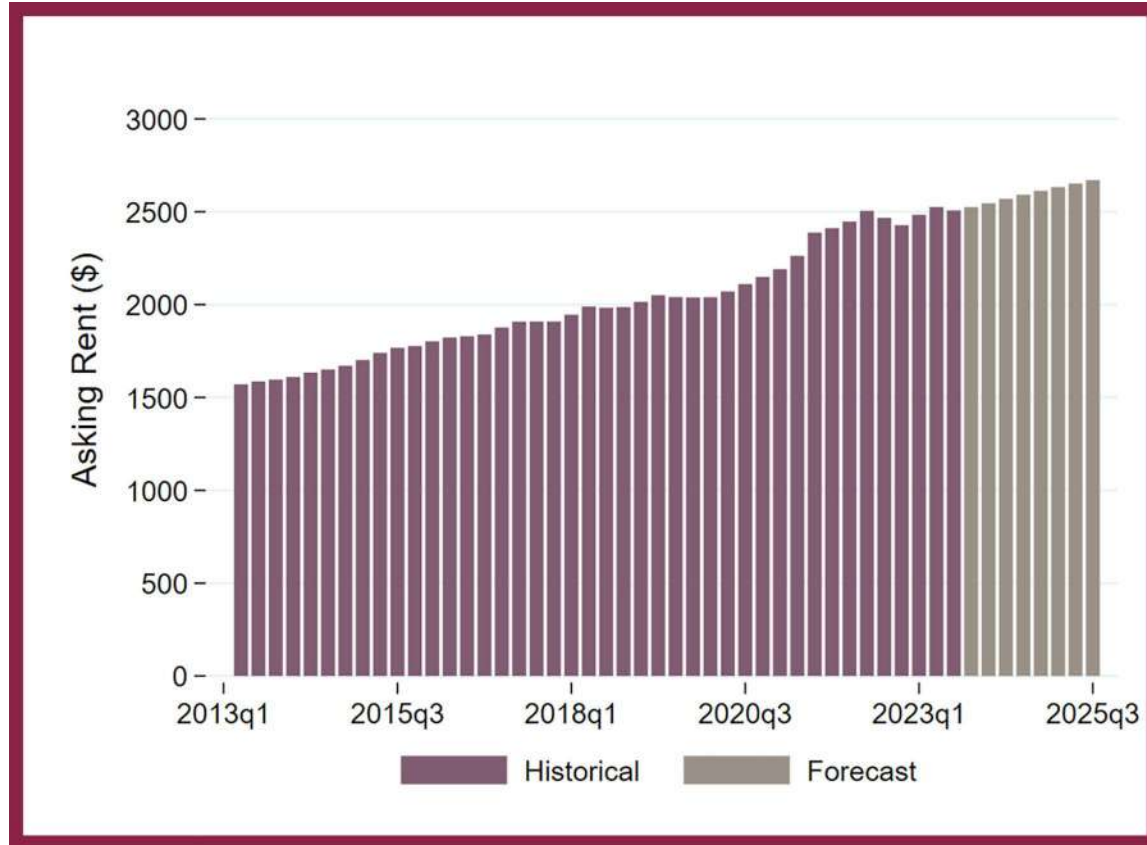
Source: U.S. Bureau of Labor Statistics

Ventura · Migration

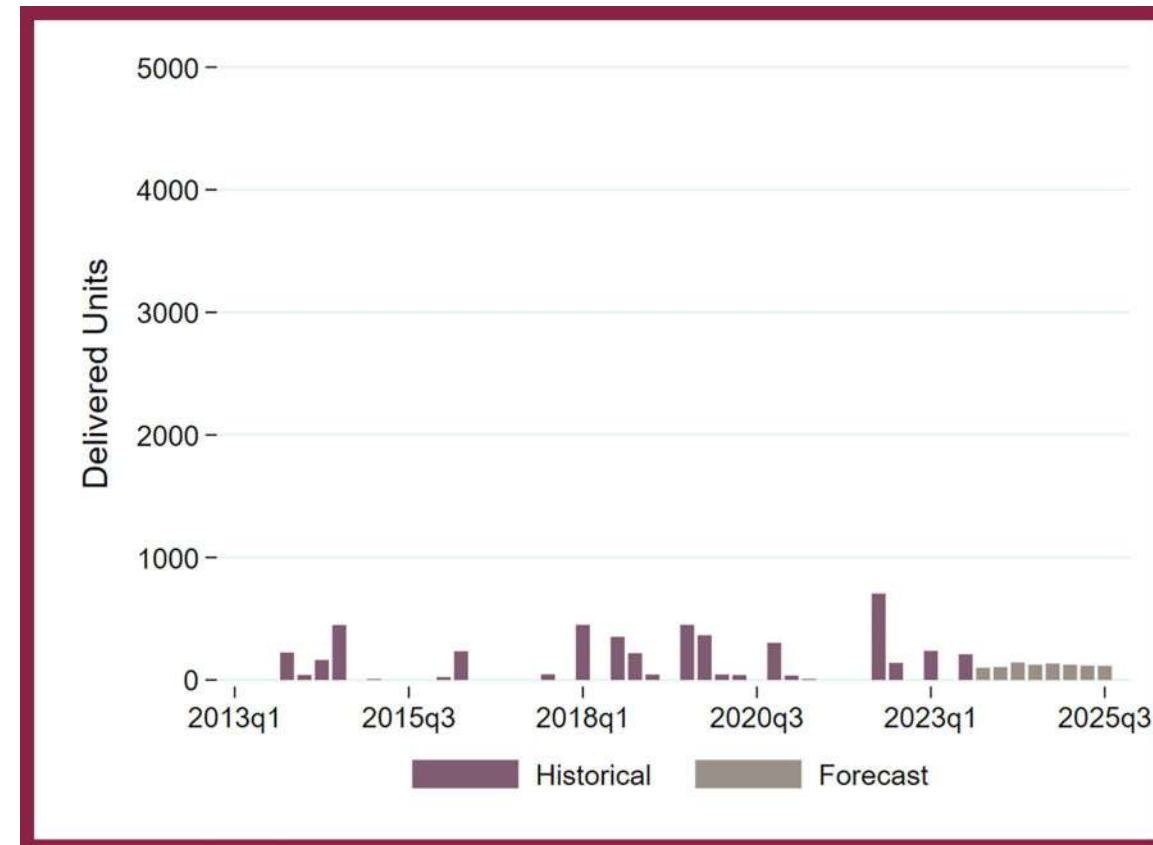
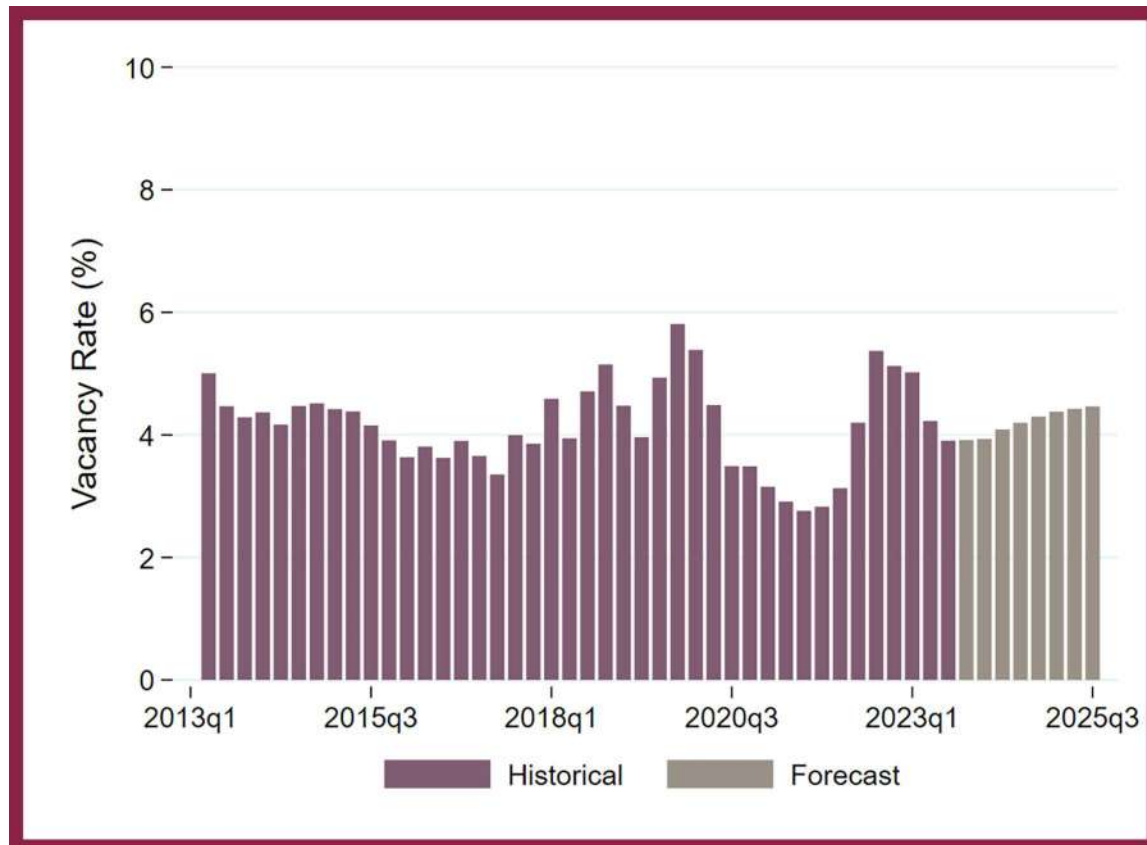


Source: USC Casden forecasts based on CoStar data

Ventura County Asking Rents · Rent Growth Ventura County, 2013-2025

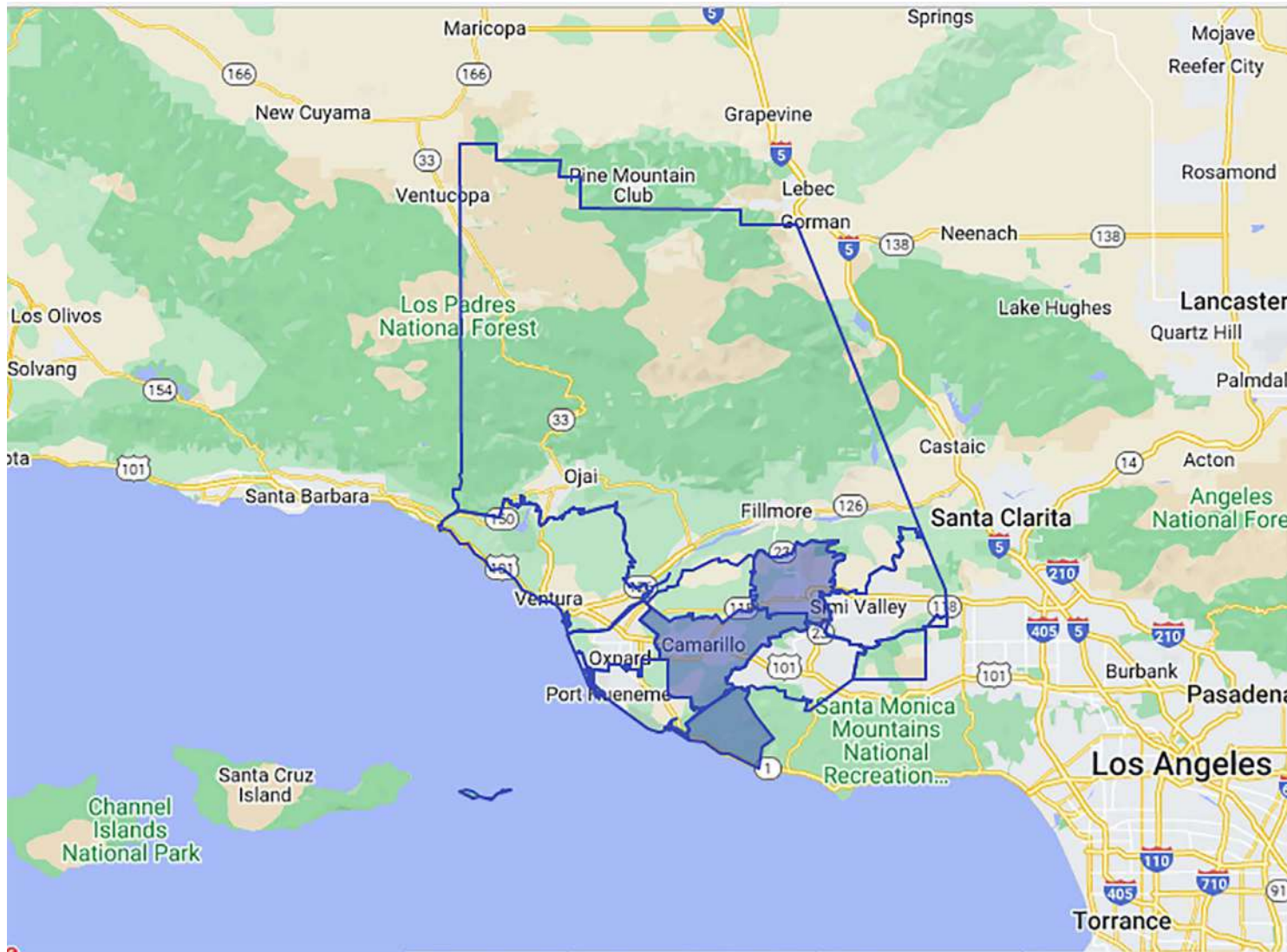


Ventura County Vacancy · Delivered Units · Ventura County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Camarillo-Moorpark-Newbury Park

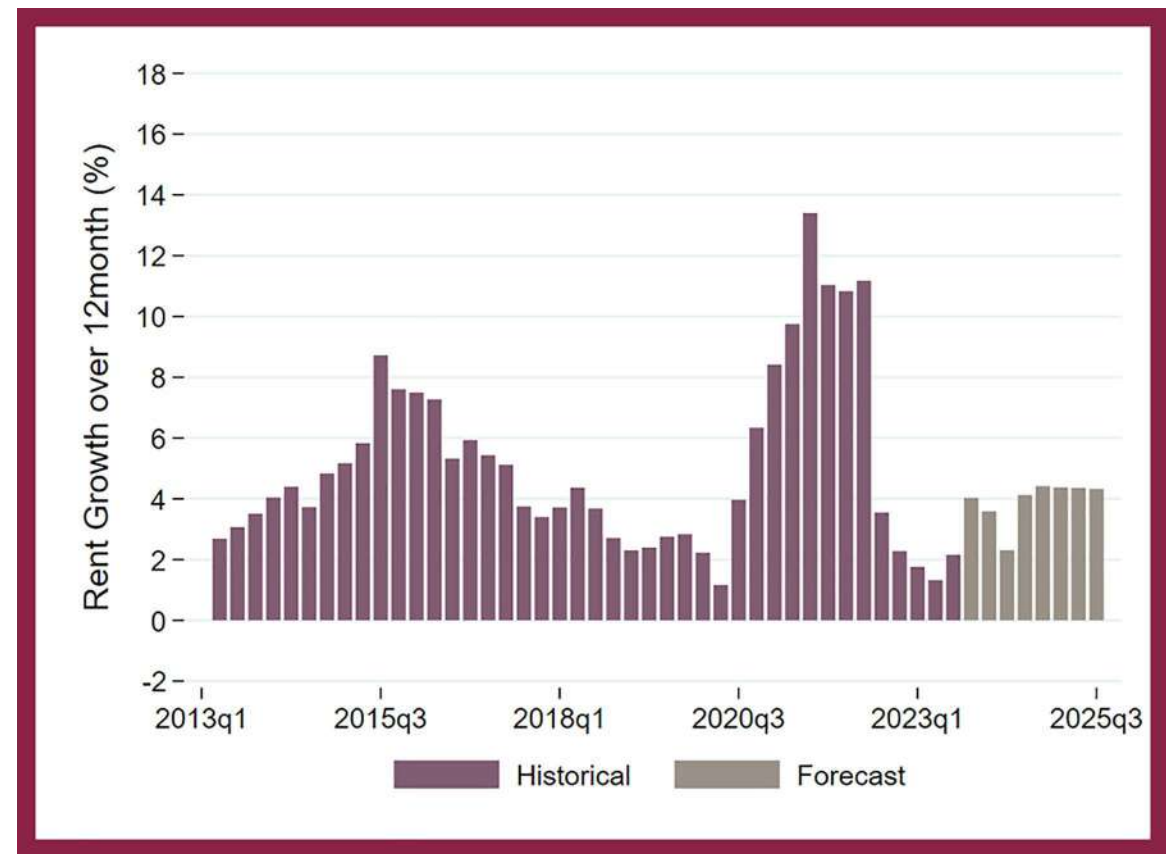
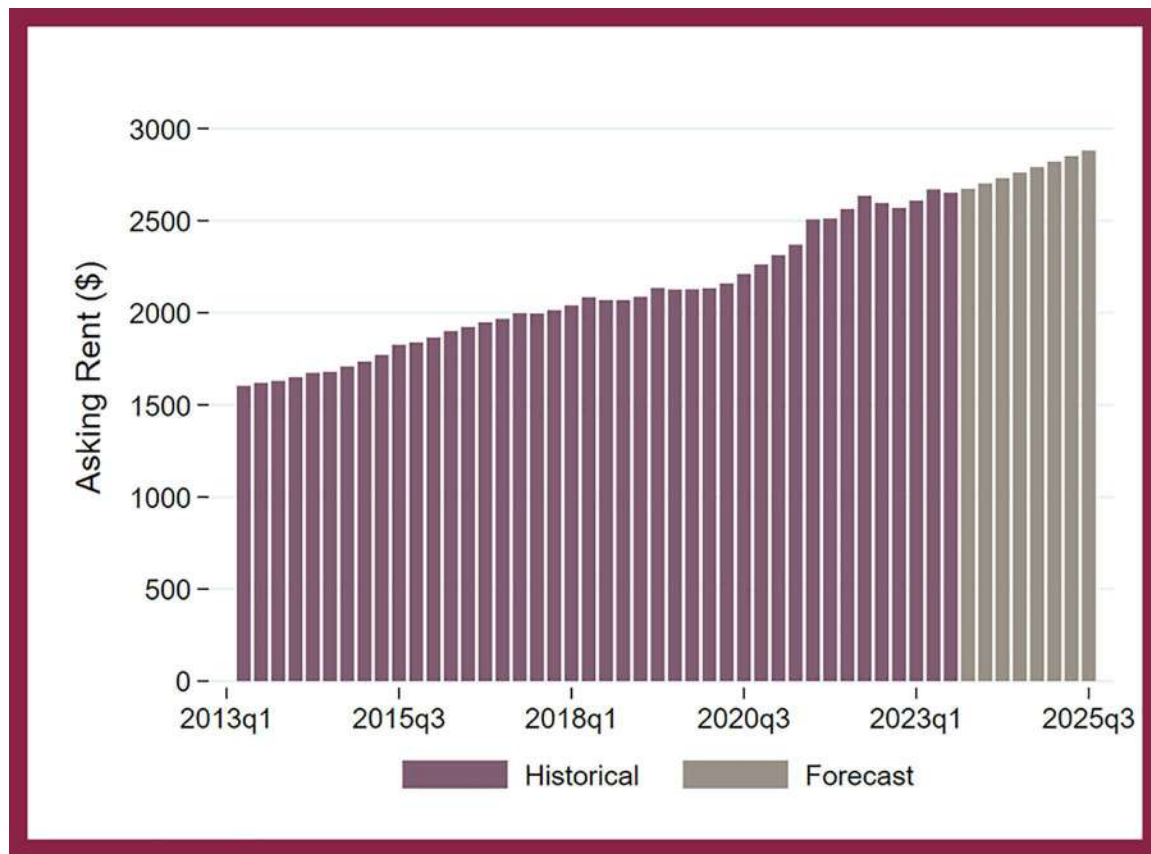


Camarillo-Moorpark-Newbury Park

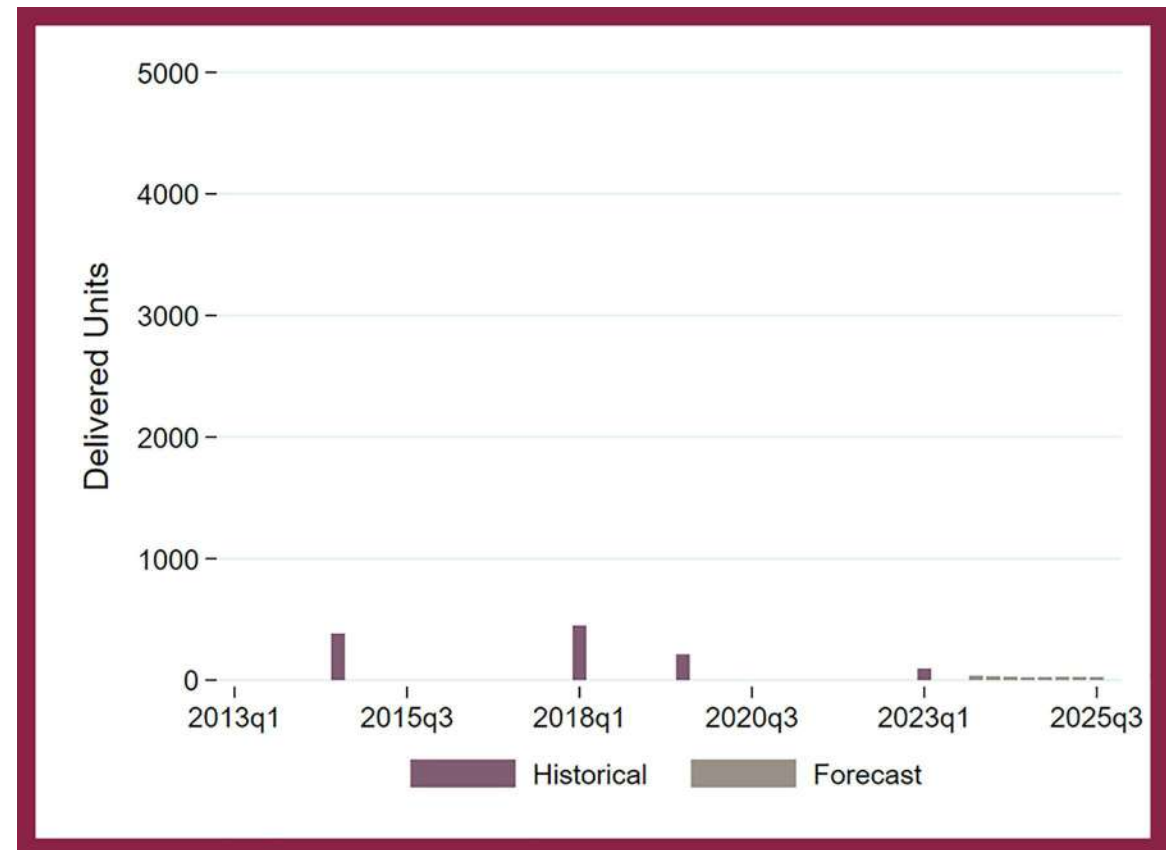
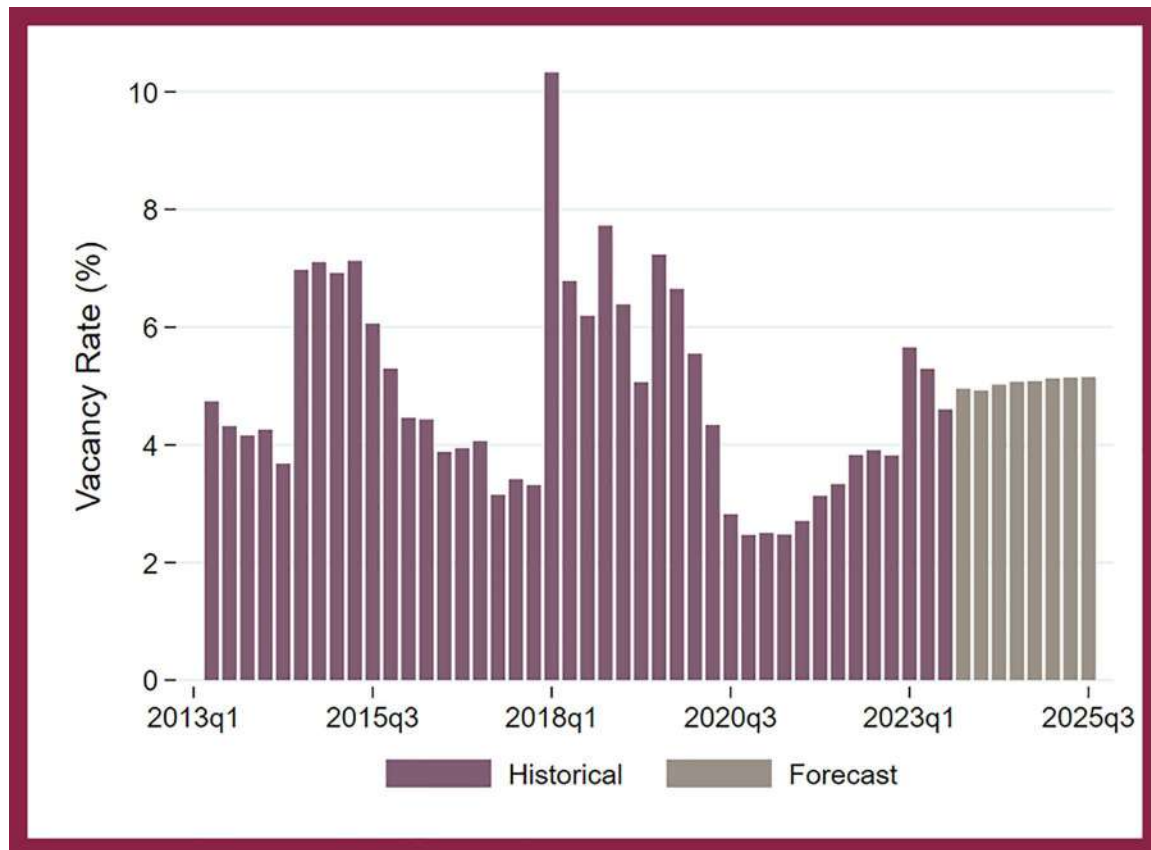
	ALL	RENTERS
RACE		
white only(%)	45.79	33.96
black only(%)	1.66	0.72
asian only(%)	8.97	5.10
hispanic(%)	38.80	52.58
other race(%)	4.78	7.64
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	9.68	13.97
highschool diploma, 18 yrs or more(%)	15.65	17.68
some college education, 18 yrs or more(%)	25.75	21.20
bachelors degree, 18 yrs or more(%)	16.27	10.68
more than bachelors degree, 18 yrs or more(%)	10.83	7.40
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		51.41
renter households living in 2-4 unit housing(%)		4.27
renter households living in 5-9 unit housing(%)		10.38
renter households living in 10-19 unit housing(%)		10.43
renter households living in 20+ unit housing(%)		20.17
renter households living in other types of housing(%)		3.35
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		21.38
renter households living in a structure built between 1970 and 1999(%)		45.17
renter households living in a structure built between 2000 and 2009(%)		24.35
renter households living in a structure built between 2010 and 2019(%)		9.10
renter households living in a structure built in 2020 and 2021(%)		0.00
HOUSEHOLD STATISTICS		
share of renter households(%)	30.32	
share of renter households living in multifamily structure(%)		40.98
share of rent-burdened households(%)		61.66
share of households with children(%)	42.14	43.24
average household size	2.98	2.95
median household income	\$102,993	\$76,627
MIGRATION STATISTICS		
population living in the same house for over a year(%)	89.35	86.46
population who moved within CA last year(%)	7.98	10.30
population who moved from other states to CA last year(%)	1.04	1.59
population who moved from abroad last year(%)	0.32	0.27

Source: 2021 1-Year American Community Survey

Camarillo-Moorpark-Newbury Park · Asking Rents · Rent Growth · Ventura County, 2013-2025

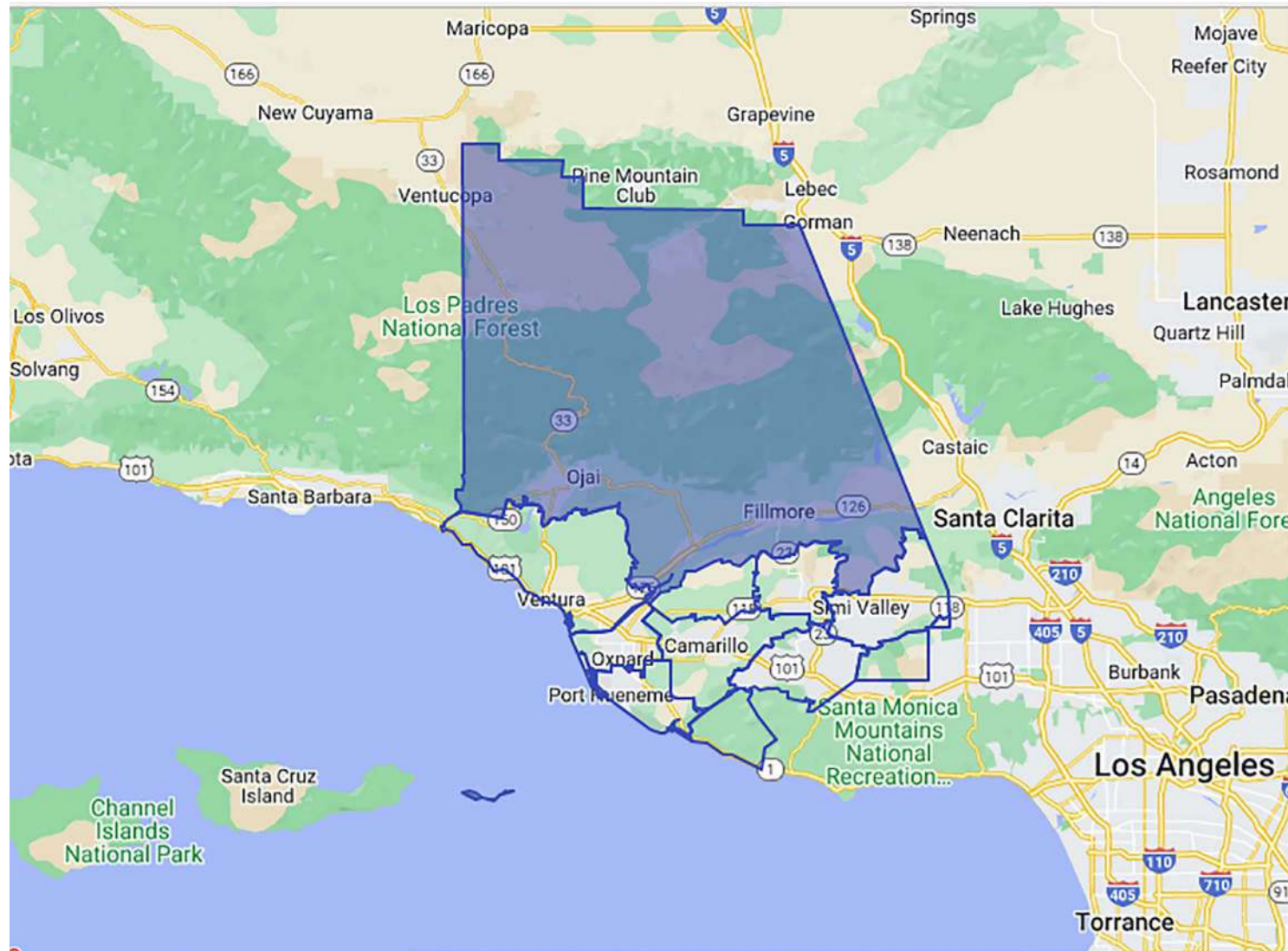


Camarillo-Moorpark · Newbury Park Vacancy · Delivered Units · Ventura County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Outlying Ventura County

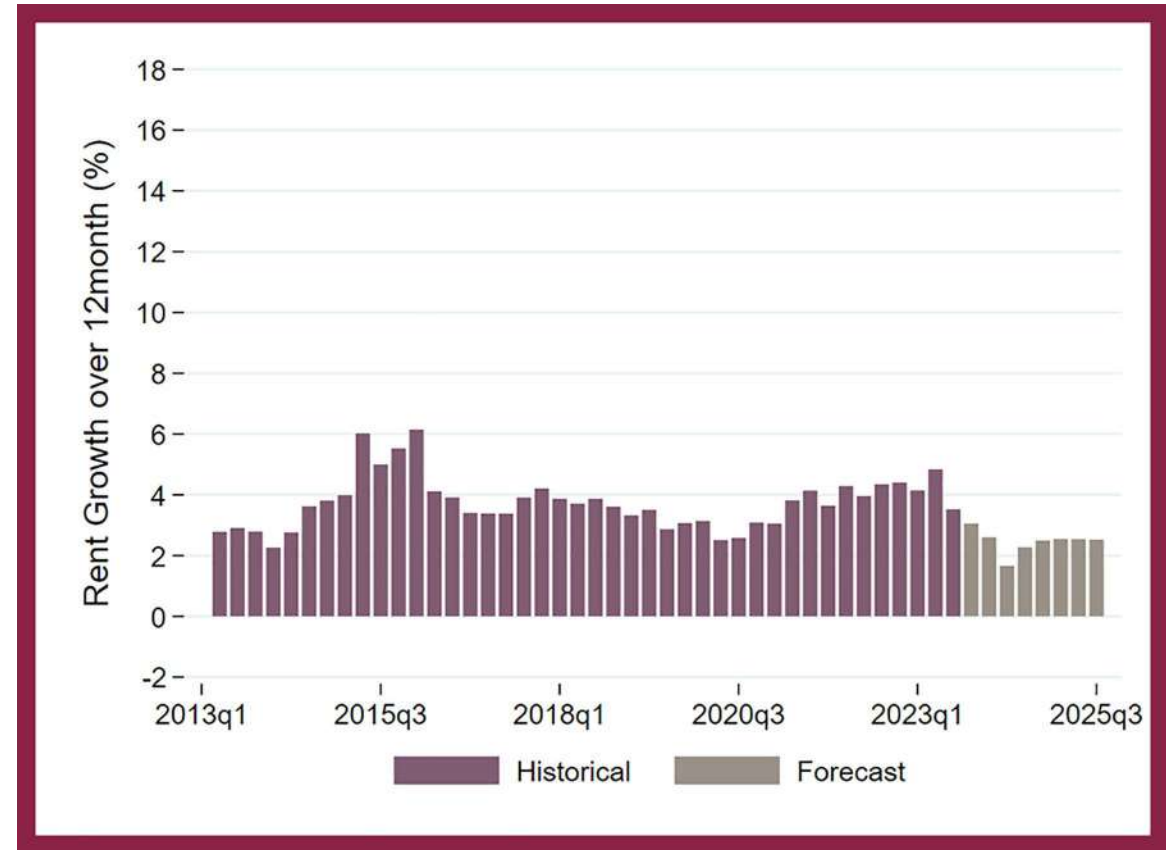
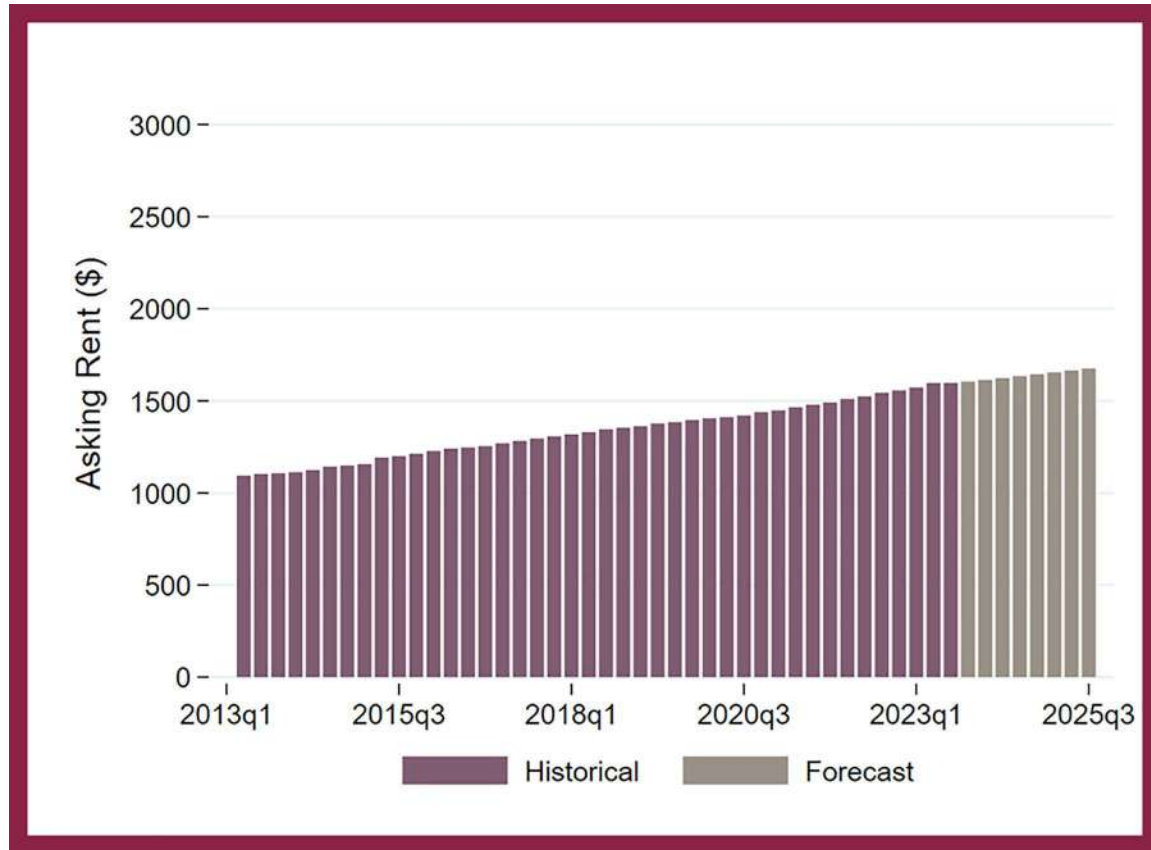


Outlying Ventura County

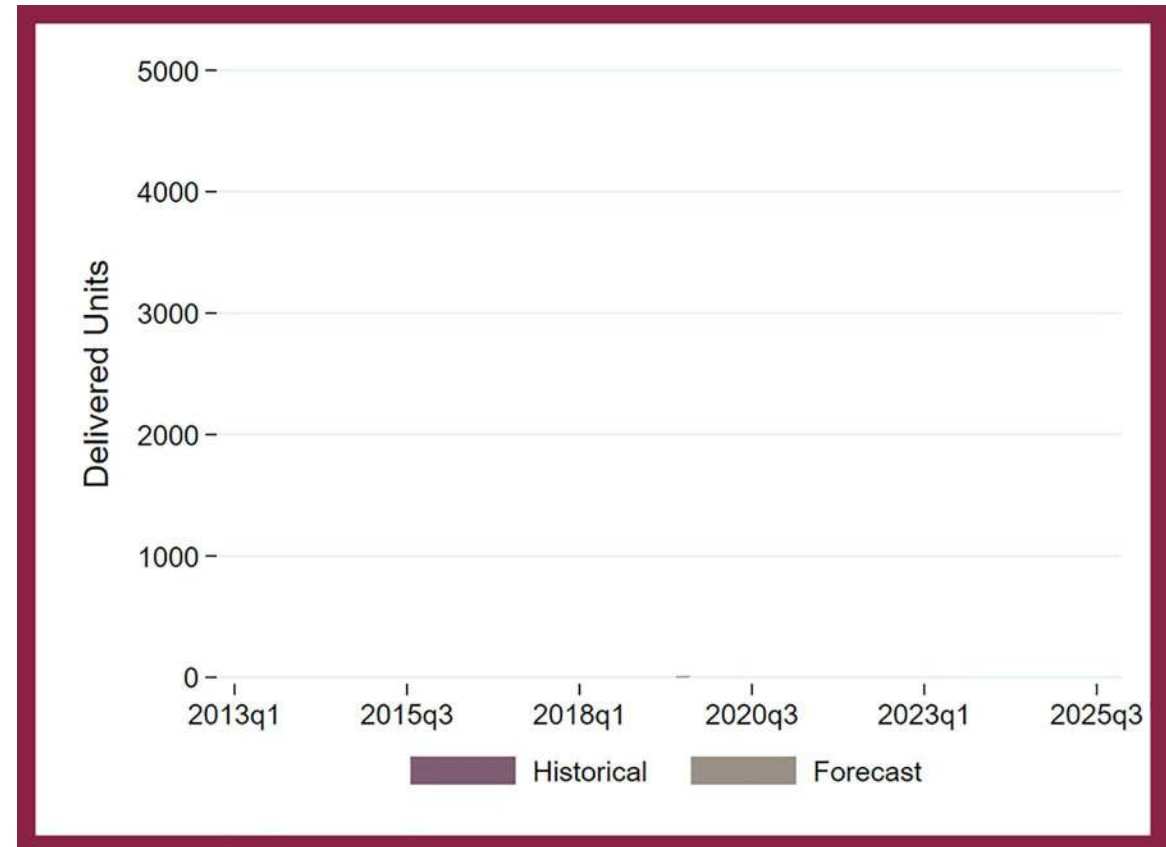
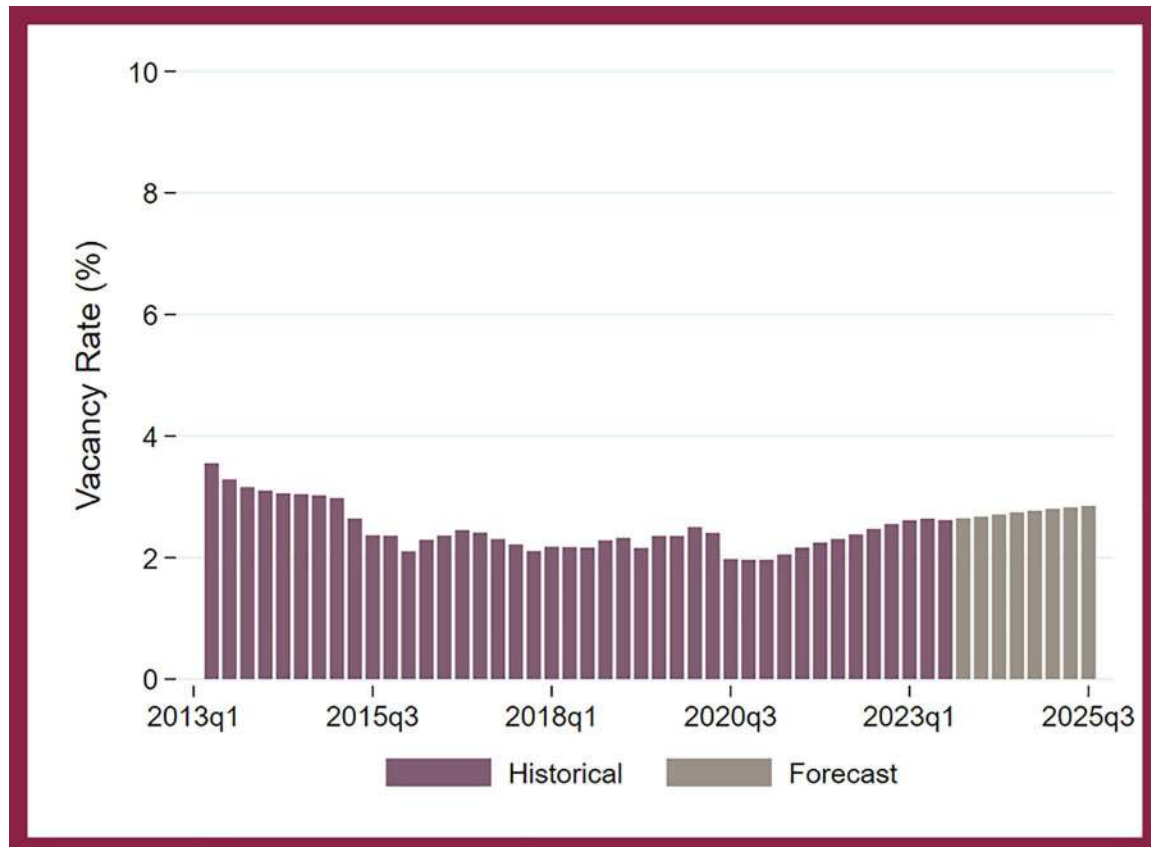
	ALL	RENTERS
RACE		
white only(%)	39.90	32.39
black only(%)	0.64	0.93
asian only(%)	3.20	1.35
hispanic(%)	52.75	62.85
other race(%)	3.51	2.48
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	14.77	18.61
highschool diploma, 18 yrs or more(%)	14.88	16.72
some college education, 18 yrs or more(%)	28.20	24.60
bachelors degree, 18 yrs or more(%)	11.89	5.49
more than bachelors degree, 18 yrs or more(%)	7.31	3.53
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		66.85
renter households living in 2-4 unit housing(%)		10.10
renter households living in 5-9 unit housing(%)		3.47
renter households living in 10-19 unit housing(%)		2.27
renter households living in 20+ unit housing(%)		8.56
renter households living in other types of housing(%)		8.75
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		52.22
renter households living in a structure built between 1970 and 1999(%)		33.11
renter households living in a structure built between 2000 and 2009(%)		12.38
renter households living in a structure built between 2010 and 2019(%)		2.30
renter households living in a structure built in 2020 and 2021(%)		0.00
HOUSEHOLD STATISTICS		
share of renter households(%)	35.72	
share of renter households living in multifamily structure(%)		14.30
share of rent-burdened households(%)		50.88
share of households with children(%)	49.39	56.50
average household size	3.04	3.05
median household income	\$83,630	\$52,949
MIGRATION STATISTICS		
population living in the same house for over a year(%)	89.90	88.93
population who moved within CA last year(%)	7.70	8.18
population who moved from other states to CA last year(%)	0.10	0.24
population who moved from abroad last year(%)	0.25	0.28

Source: 2021 1-Year American Community Survey

Outlying Ventura County · Asking Rents · Rent Growth · Ventura County, 2013-2025

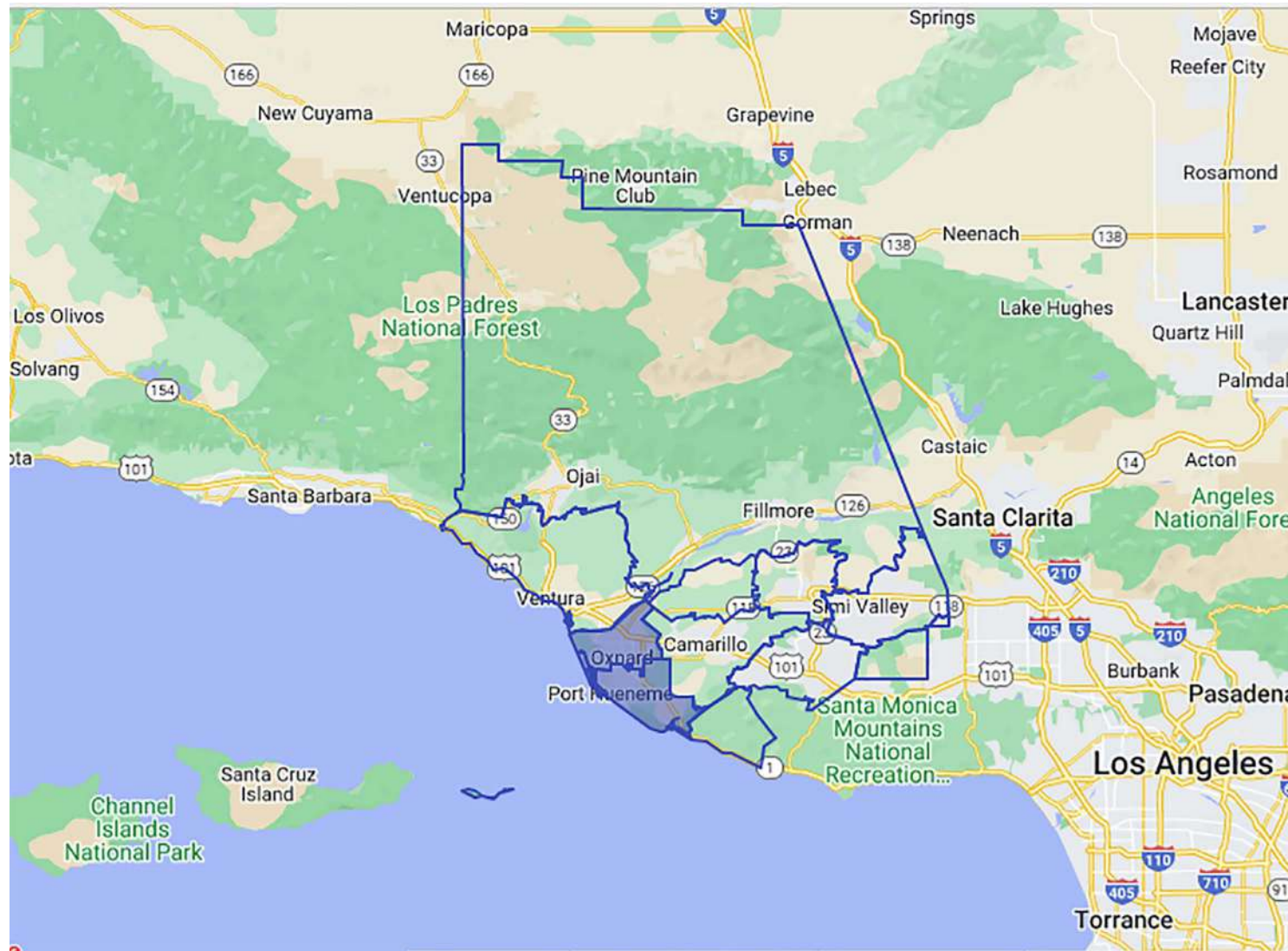


Outlying Ventura County Vacancy · Delivered Units · Ventura County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Oxnard- Port Hueneme

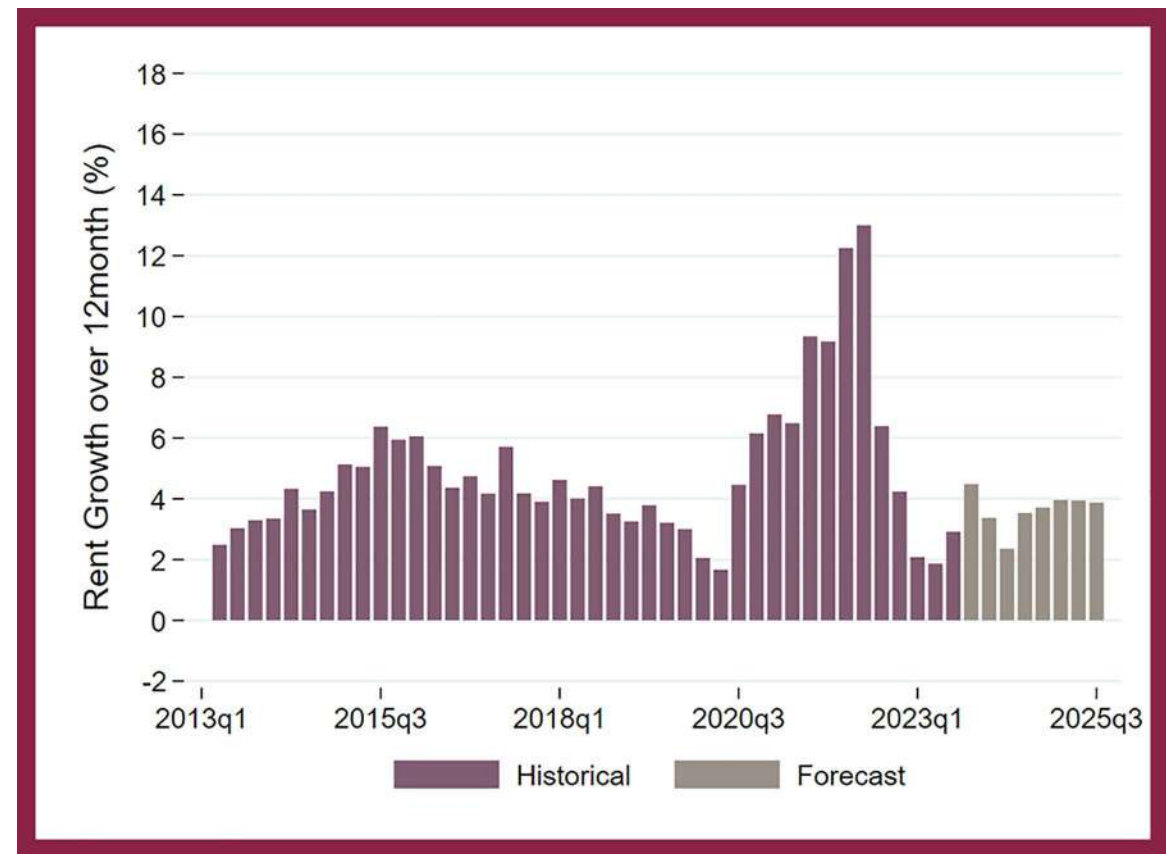
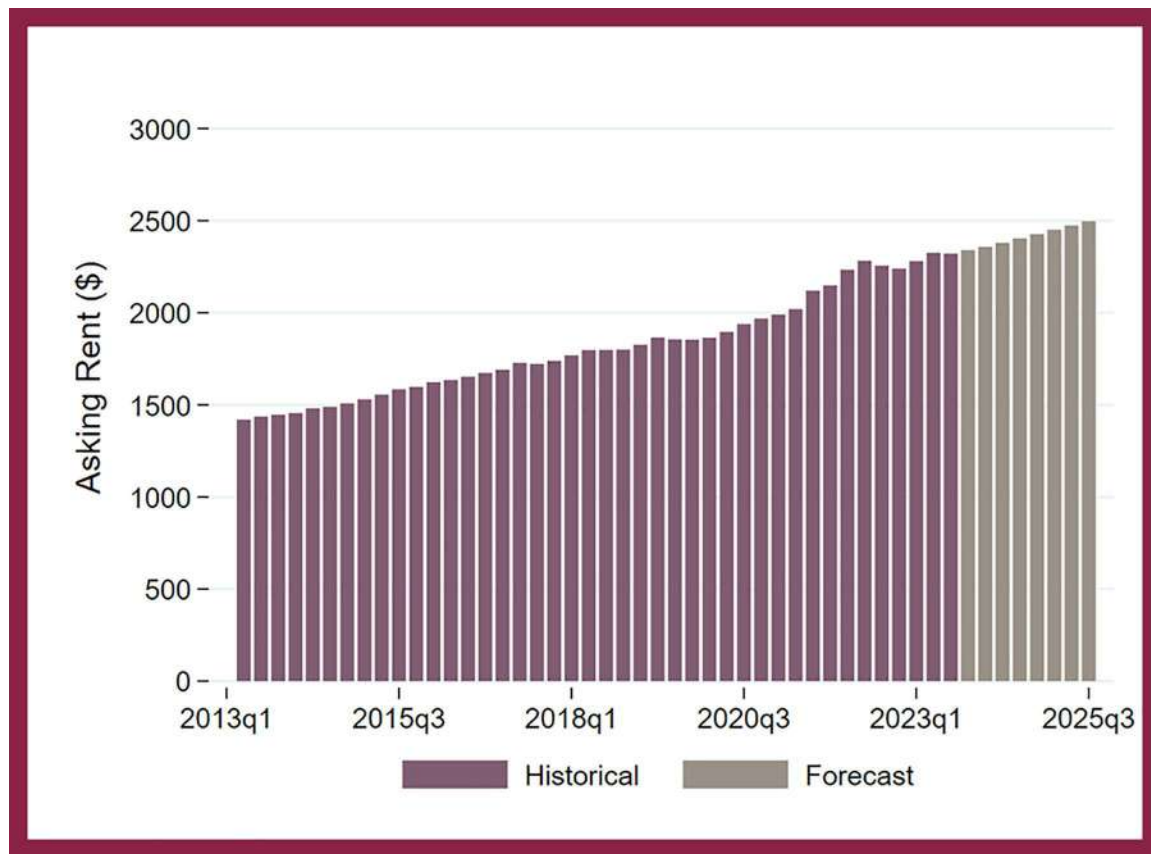


Oxnard- Port Hueneme

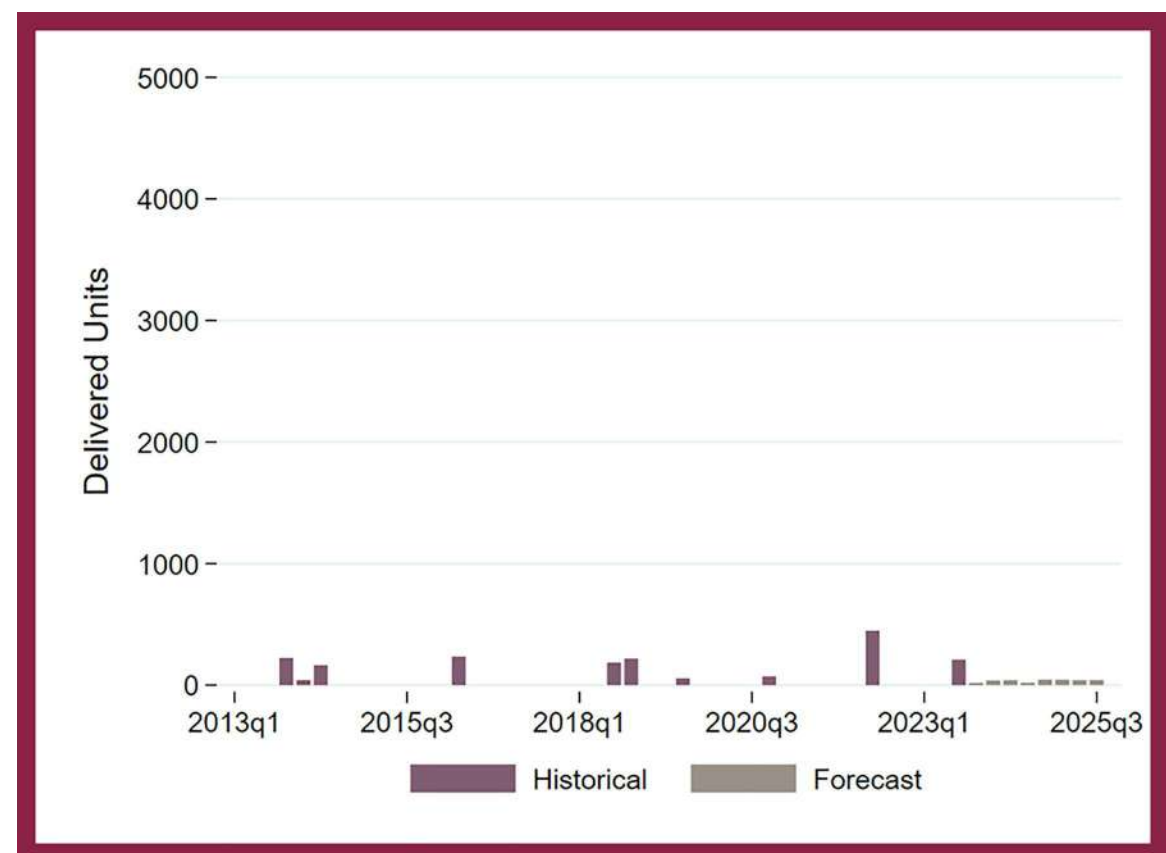
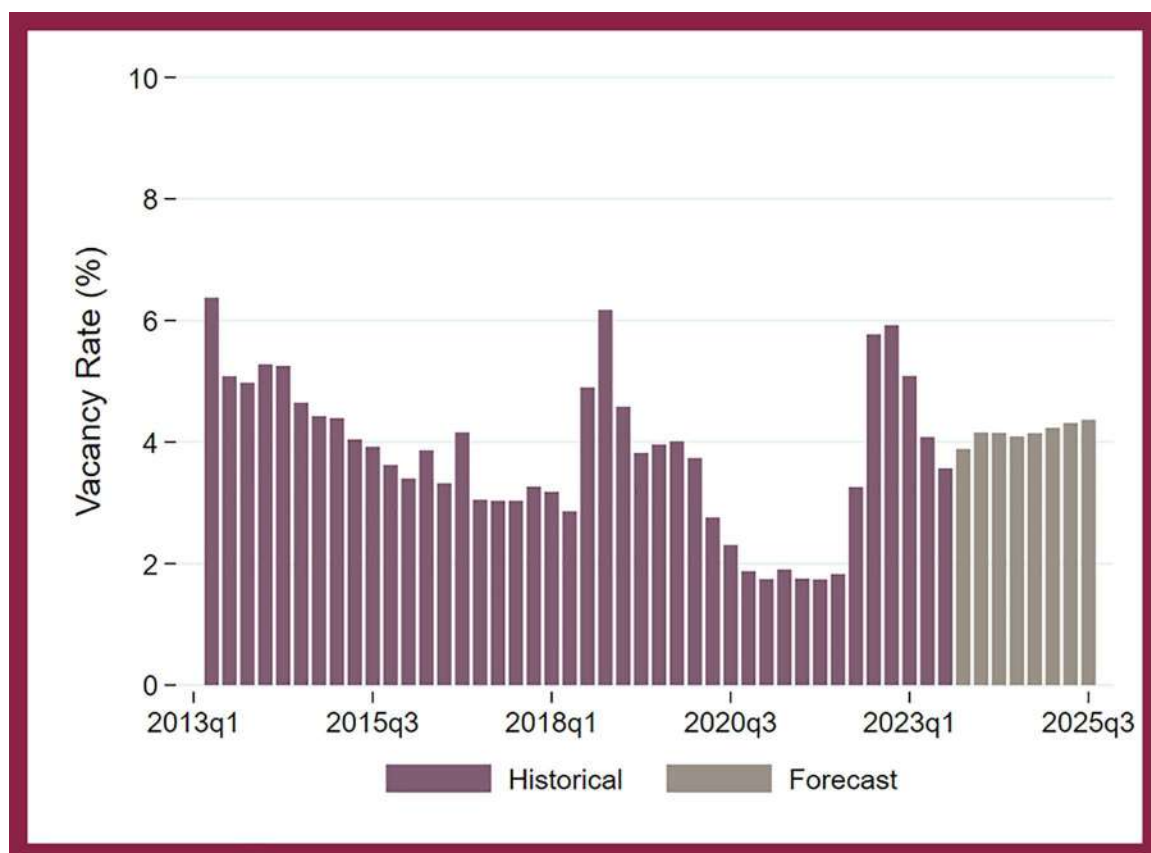
	ALL	RENTERS
RACE		
white only(%)	17.10	11.84
black only(%)	2.12	2.07
asian only(%)	7.21	4.73
hispanic(%)	71.39	79.18
other race(%)	2.19	2.18
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	22.13	27.26
highschool diploma, 18 yrs or more(%)	15.47	16.86
some college education, 18 yrs or more(%)	21.02	15.49
bachelors degree, 18 yrs or more(%)	10.94	6.85
more than bachelors degree, 18 yrs or more(%)	4.26	1.82
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		40.32
renter households living in 2-4 unit housing(%)		14.26
renter households living in 5-9 unit housing(%)		11.36
renter households living in 10-19 unit housing(%)		13.69
renter households living in 20+ unit housing(%)		18.31
renter households living in other types of housing(%)		2.06
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		36.68
renter households living in a structure built between 1970 and 1999(%)		44.79
renter households living in a structure built between 2000 and 2009(%)		9.12
renter households living in a structure built between 2010 and 2019(%)		9.17
renter households living in a structure built in 2020 and 2021(%)		0.23
HOUSEHOLD STATISTICS		
share of renter households(%)	45.19	
share of renter households living in multifamily structure(%)		43.36
share of rent-burdened households(%)		49.86
share of households with children(%)	49.09	52.73
average household size	3.78	3.71
median household income	\$87,544	\$63,650
MIGRATION STATISTICS		
population living in the same house for over a year(%)	90.96	90.20
population who moved within CA last year(%)	6.55	7.46
population who moved from other states to CA last year(%)	0.62	0.27
population who moved from abroad last year(%)	0.25	0.14

Source: 2021 1-Year American Community Survey

Oxnard- Port Hueneme · Asking Rents · Rent Growth · Ventura County, 2013-2025

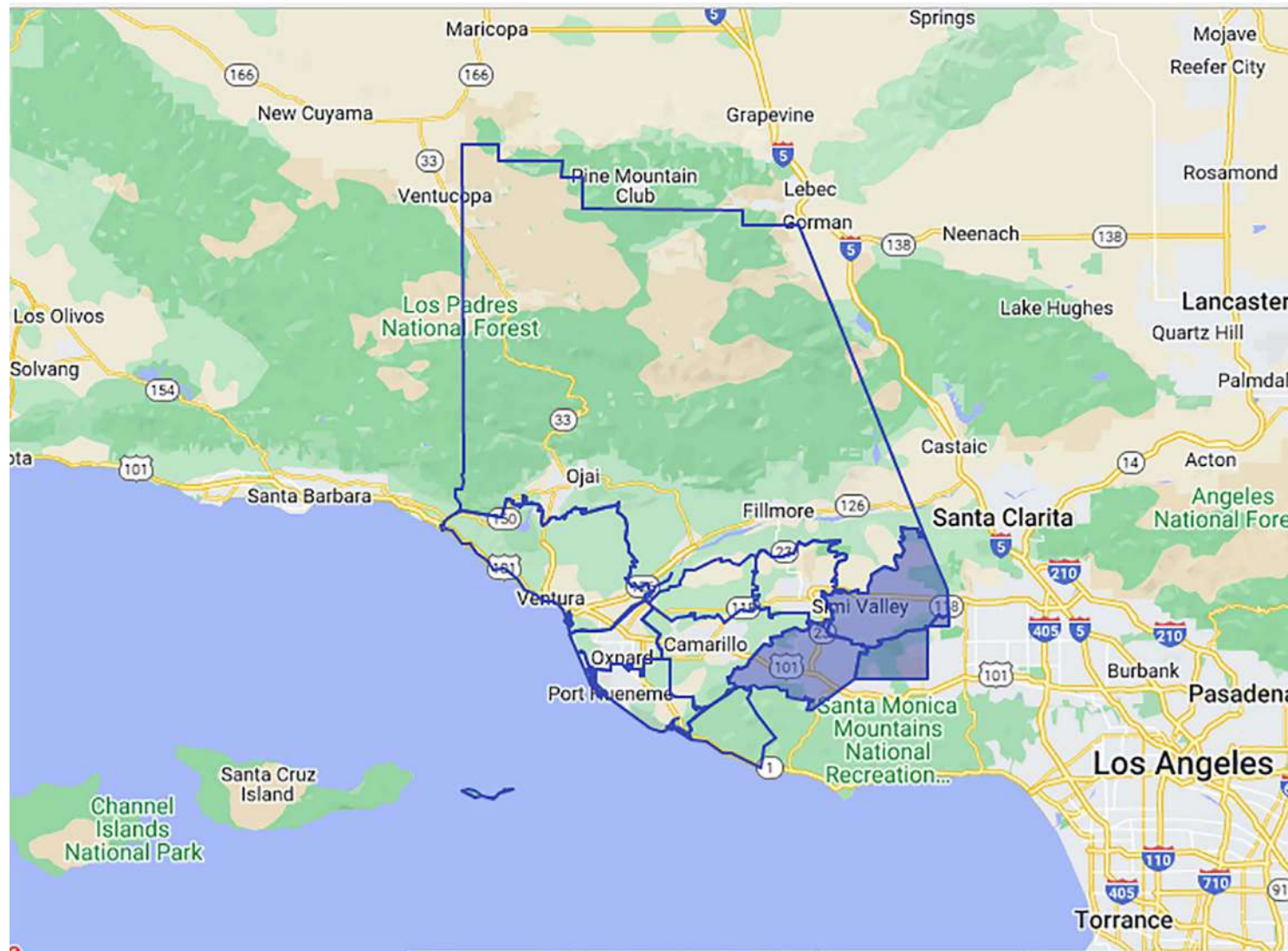


Oxnard- Port Hueneme Vacancy · Delivered Units · Ventura County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Simi Valley- Thousand Oaks



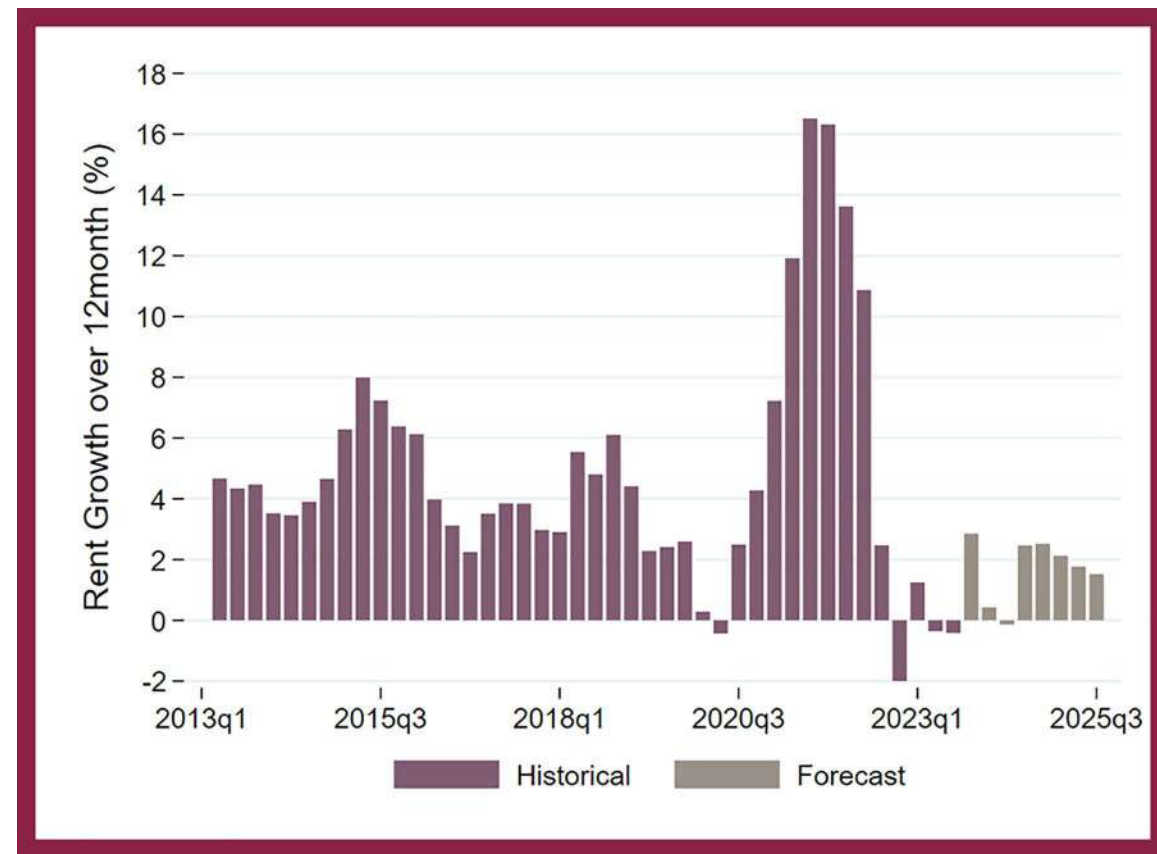
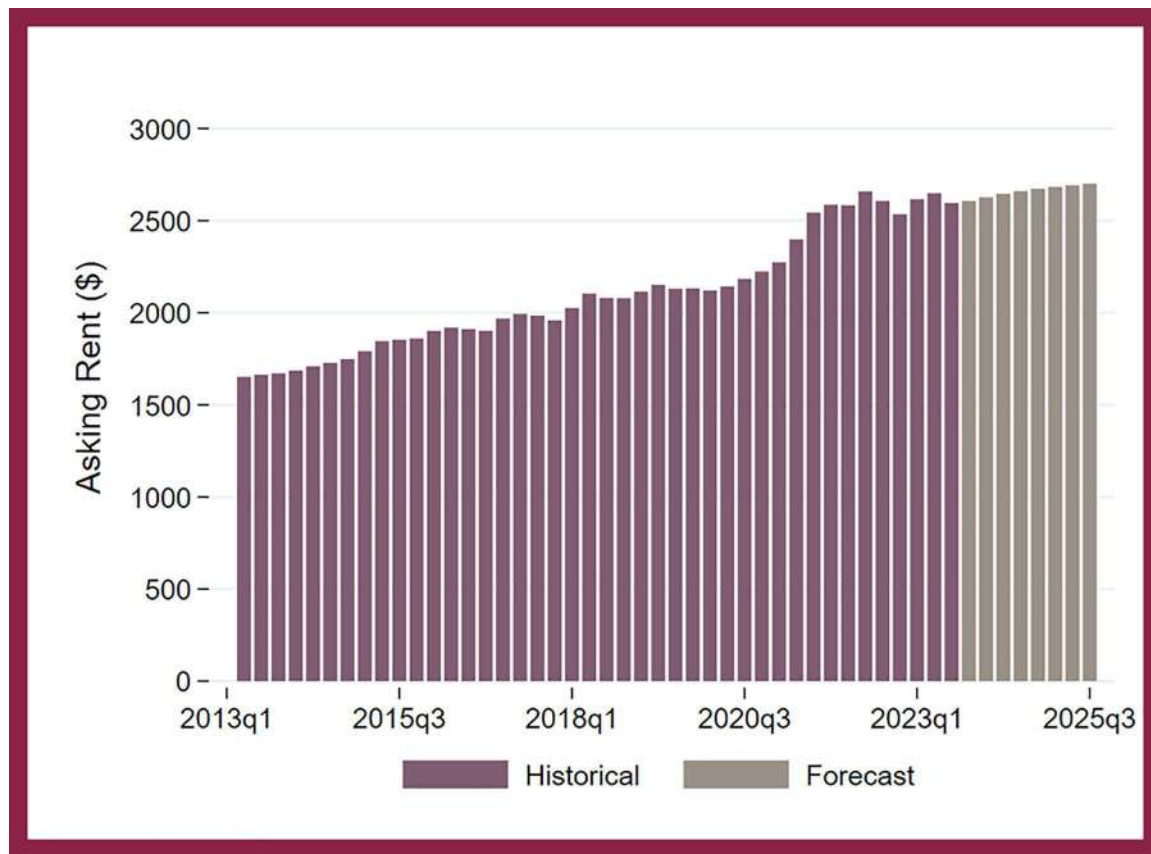
Simi Valley- Thousand Oaks

ALL RENTERS

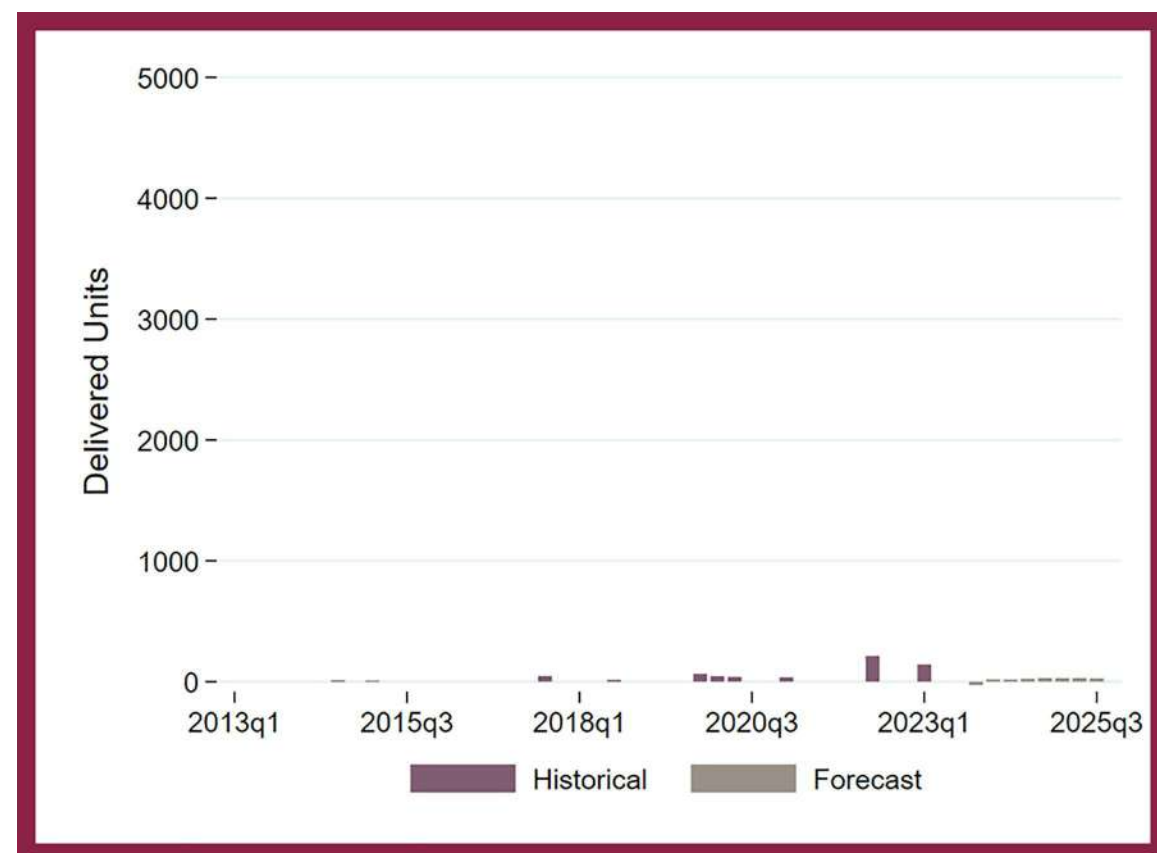
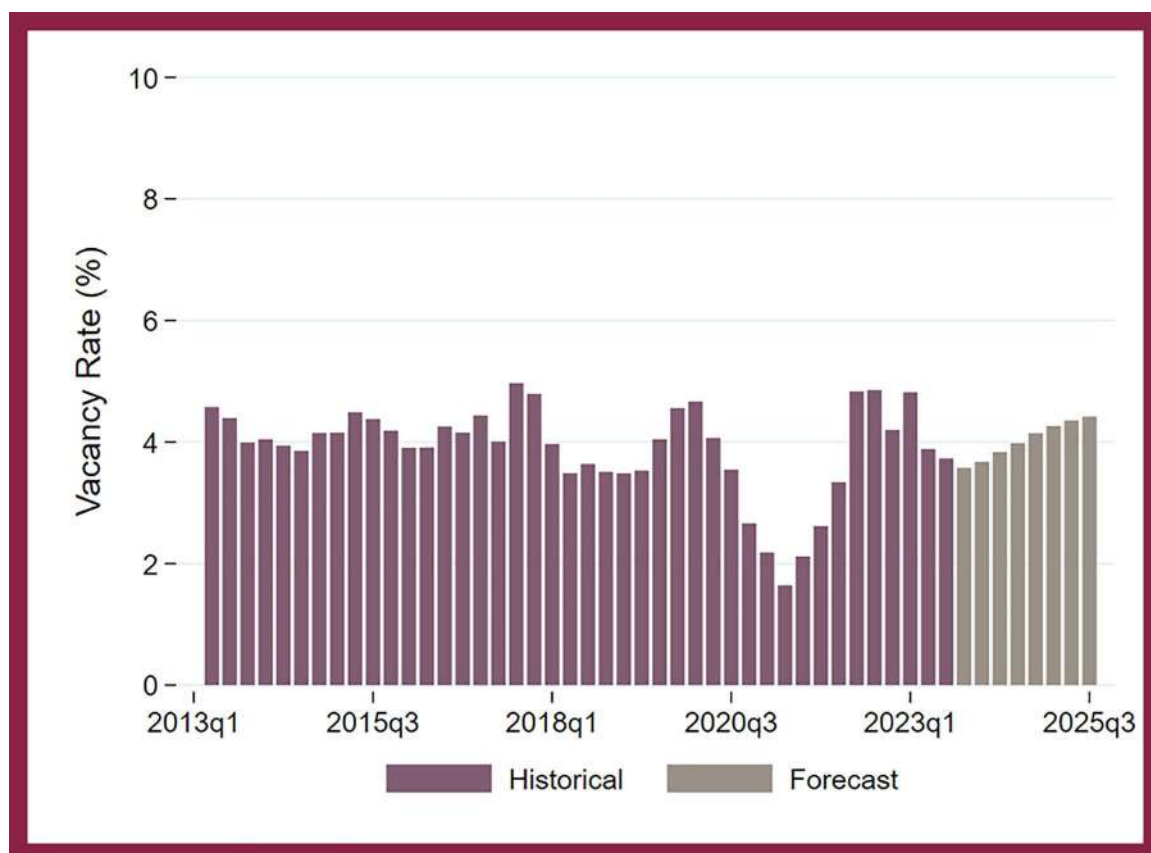
RACE		
white only(%)	57.72	42.01
black only(%)	1.89	3.04
asian only(%)	10.00	7.32
hispanic(%)	24.92	42.96
other race(%)	5.47	4.67
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	6.44	10.56
highschool diploma, 18 yrs or more(%)	16.58	17.99
some college education, 18 yrs or more(%)	25.06	24.70
bachelors degree, 18 yrs or more(%)	19.70	15.88
more than bachelors degree, 18 yrs or more(%)	12.55	6.47
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		44.12
renter households living in 2-4 unit housing(%)		13.98
renter households living in 5-9 unit housing(%)		12.65
renter households living in 10-19 unit housing(%)		6.60
renter households living in 20+ unit housing(%)		20.81
renter households living in other types of housing(%)		1.85
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		21.86
renter households living in a structure built between 1970 and 1999(%)		67.11
renter households living in a structure built between 2000 and 2009(%)		8.86
renter households living in a structure built between 2010 and 2019(%)		2.17
renter households living in a structure built in 2020 and 2021(%)		0.00
HOUSEHOLD STATISTICS		
share of renter households(%)	28.47	
share of renter households living in multifamily structure(%)		40.06
share of rent-burdened households(%)		48.42
share of households with children(%)	41.51	42.05
average household size	2.76	2.75
median household income	\$108,657	\$79,304
MIGRATION STATISTICS		
population living in the same house for over a year(%)	91.79	88.18
population who moved within CA last year(%)	7.12	10.10
population who moved from other states to CA last year(%)	0.30	0.52
population who moved from abroad last year(%)	0.18	0.40

Source: 2021 1-Year American Community Survey

Simi Valley- Thousand Oaks · Asking Rents · Rent Growth · Ventura County, 2013-2025

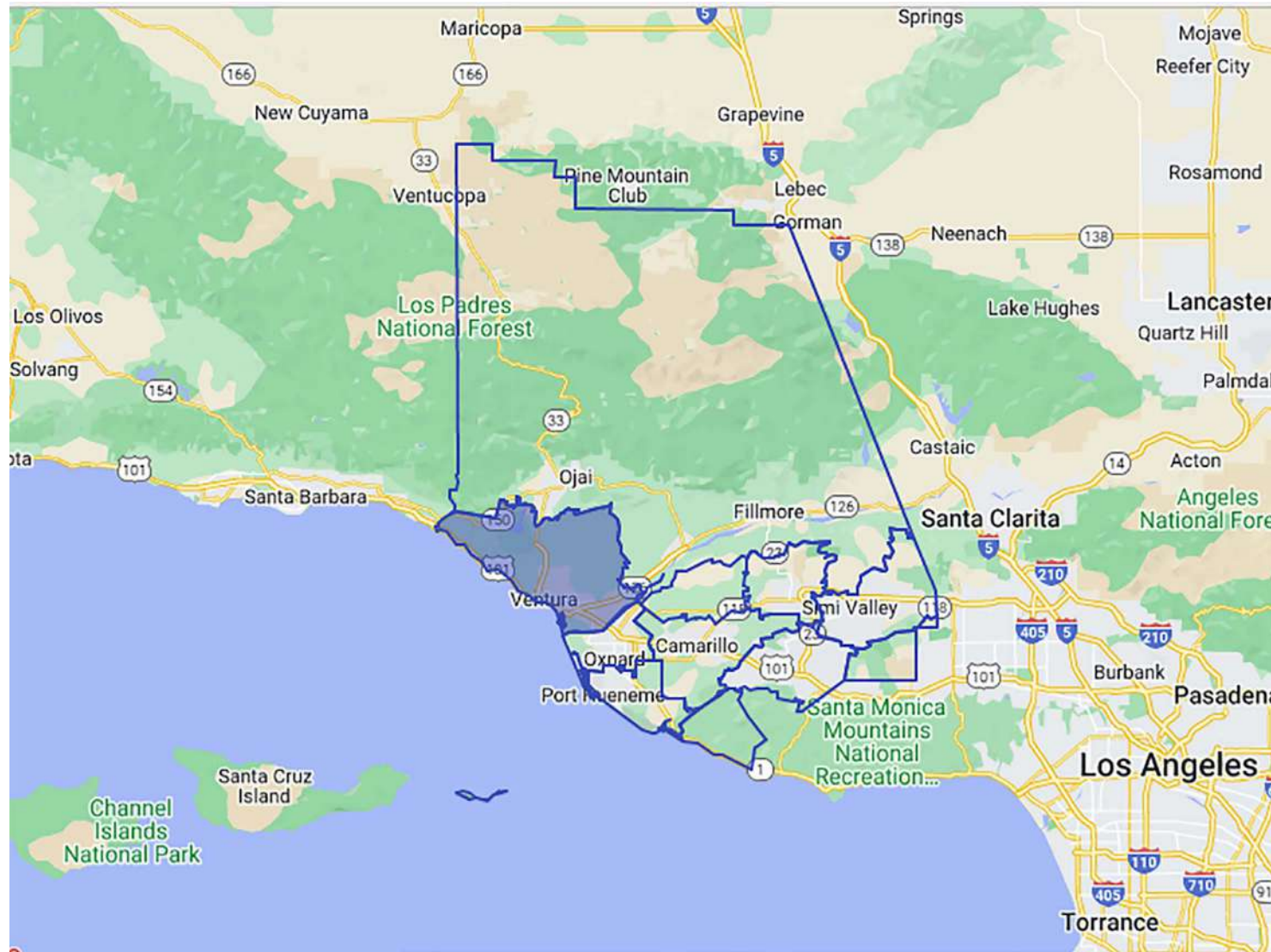


Simi Valley- Thousand Oaks Vacancy · Delivered Units · Ventura County, 2013-2025



Source: USC Casden forecasts based on CoStar data

Ventura

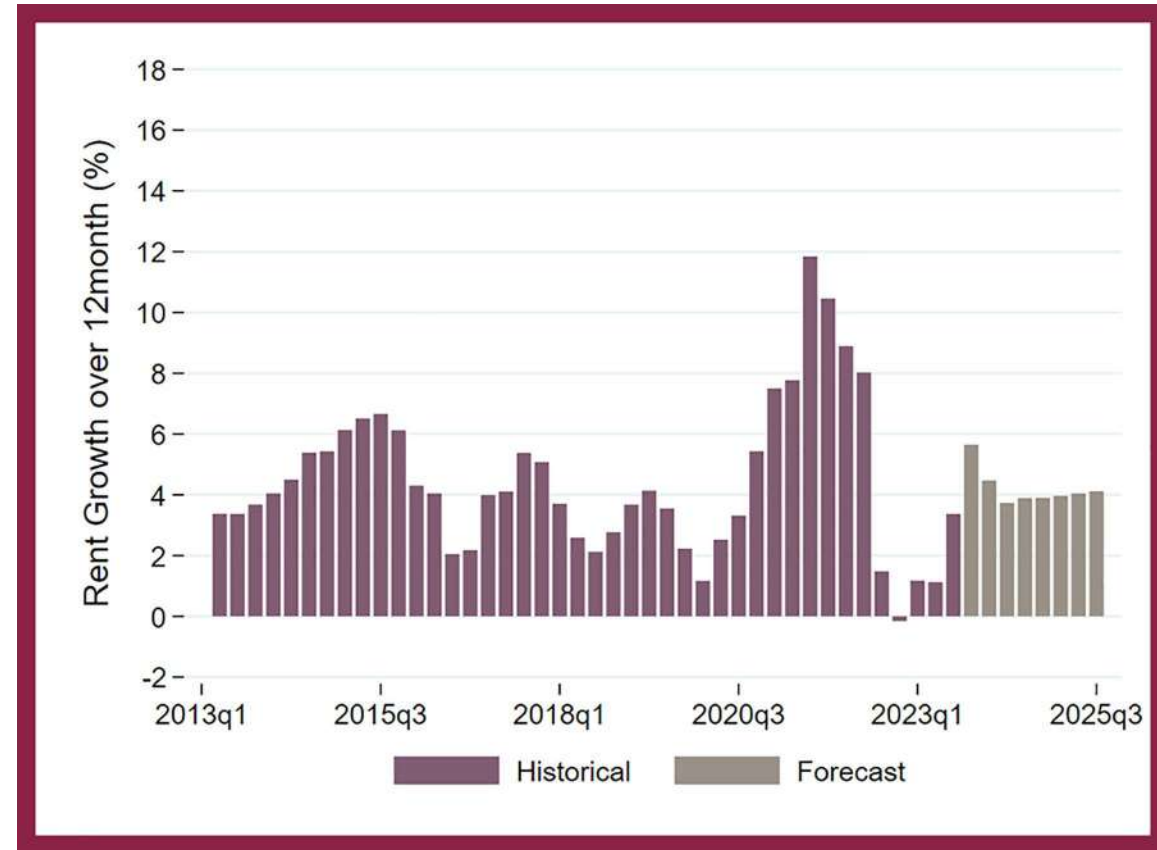
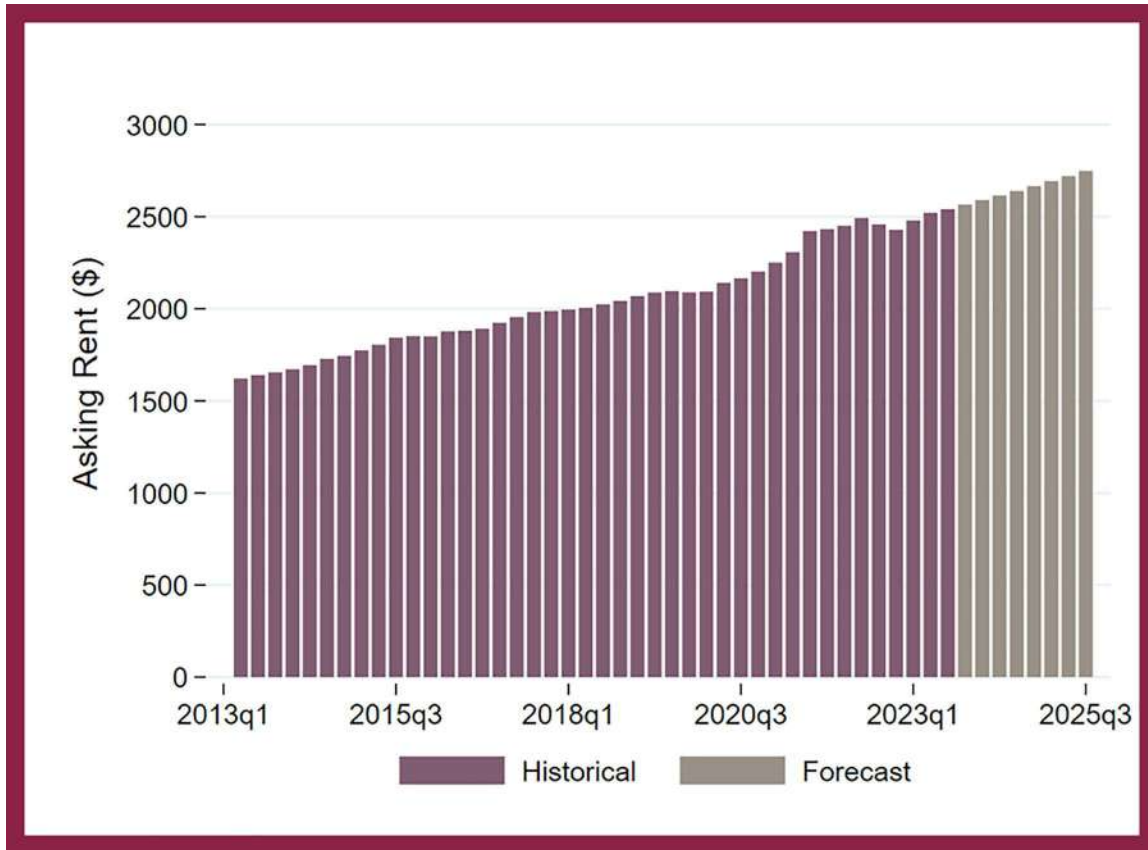


Ventura

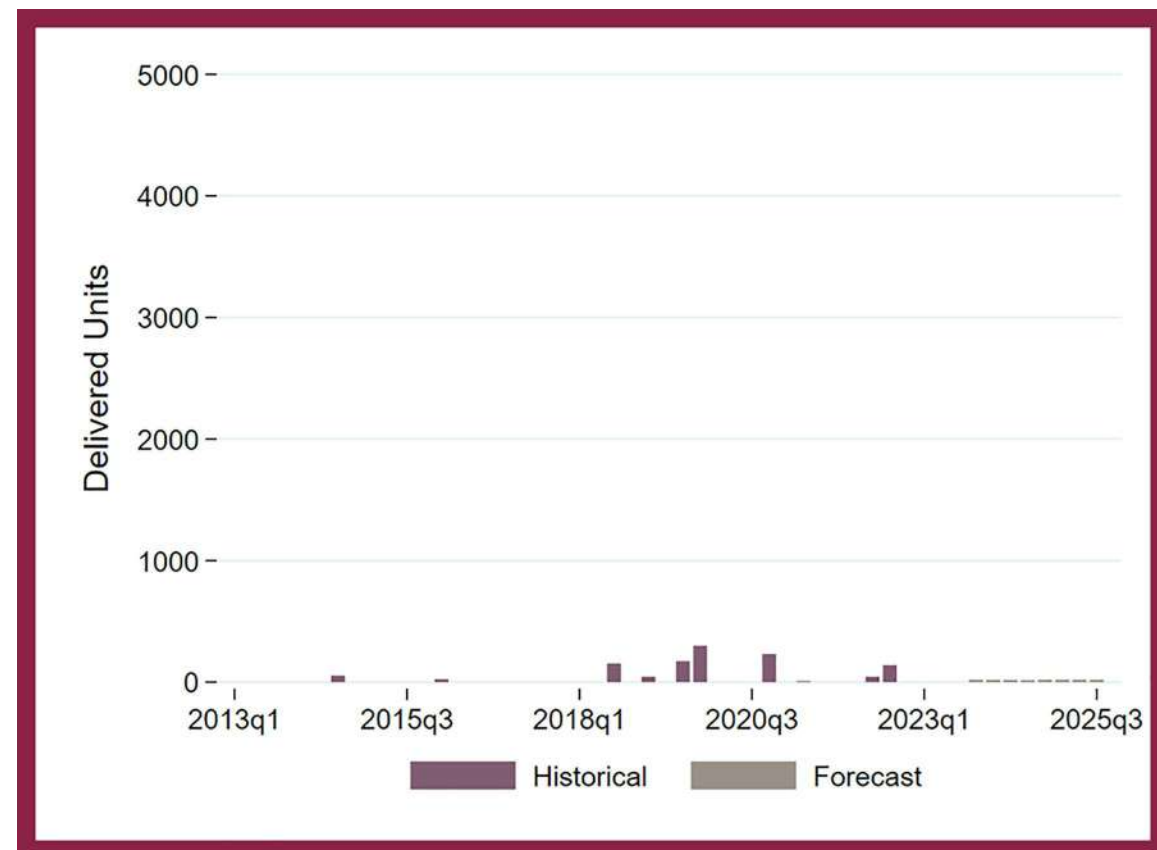
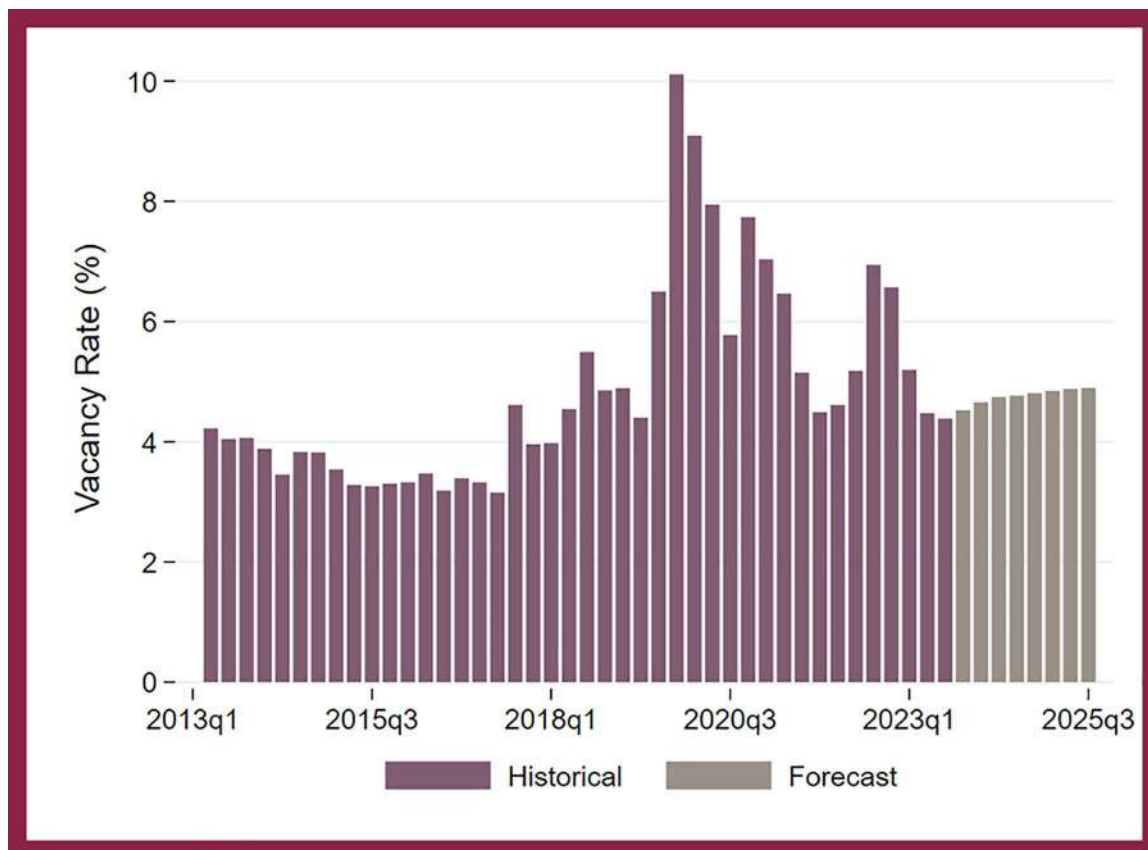
	ALL	RENTERS
RACE		
white only(%)	48.69	39.40
black only(%)	1.27	1.16
asian only(%)	5.00	5.23
hispanic(%)	39.51	46.98
other race(%)	5.54	7.22
EDUCATION		
less than highschool diploma, 18 yrs or more(%)	8.36	9.64
highschool diploma, 18 yrs or more(%)	16.00	20.33
some college education, 18 yrs or more(%)	25.64	26.58
bachelors degree, 18 yrs or more(%)	17.16	18.00
more than bachelors degree, 18 yrs or more(%)	11.92	5.82
RENTAL UNITS BY SIZE OF STRUCTURE		
renter households living in single-family housing(%)		38.33
renter households living in 2-4 unit housing(%)		15.38
renter households living in 5-9 unit housing(%)		10.66
renter households living in 10-19 unit housing(%)		11.64
renter households living in 20+ unit housing(%)		23.99
renter households living in other types of housing(%)		0.00
RENTAL UNITS BY AGE OF STRUCTURE		
renter households living in a structure built before 1970(%)		33.14
renter households living in a structure built between 1970 and 1999(%)		44.79
renter households living in a structure built between 2000 and 2009(%)		12.39
renter households living in a structure built between 2010 and 2019(%)		9.68
renter households living in a structure built in 2020 and 2021(%)		0.00
HOUSEHOLD STATISTICS		
share of renter households(%)	39.67	
share of renter households living in multifamily structure(%)		46.29
share of rent-burdened households(%)		57.26
share of households with children(%)	37.86	32.73
average household size	2.66	2.32
median household income	\$97,637	\$68,490
MIGRATION STATISTICS		
population living in the same house for over a year(%)	88.88	88.19
population who moved within CA last year(%)	9.62	9.70
population who moved from other states to CA last year(%)	0.53	0.91
population who moved from abroad last year(%)	0.24	0.35

Source: 2021 1-Year American Community Survey

Ventura · Asking Rents · Rent Growth · Ventura County, 2013-2025



Ventura Vacancy · Delivered Units · Ventura County, 2013-2025



Source: USC Casden forecasts based on CoStar data

**USC LUSK CENTER FOR REAL ESTATE
CASDEN REAL ESTATE ECONOMICS FORECAST
2023 MULTIFAMILY REPORT WHITE PAPER**

AUTHOR:

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Understanding Rental Housing Markets Near Universities | USC Casden Real Estate Economics Forecast | by Lizhong Liu

Introduction

Universities play a pivotal role in shaping the local rental housing market by accommodating a significant number of non-local students. Survey data revealed that more than 50% of undergraduate students choose to live off-campus (Kashian, 2009; U.S. Department of Education, 2009). Notably, during the Fall of 2020, 2.6 million students were enrolled in higher education institutions in California (U.S. Department of Education, 2022), underscoring the remarkable demand for off-campus housing. This phenomenon holds particular significance for homeowners and investors in Southern California, where over 400 higher education institutions are situated.

Previous research found that properties close to universities command higher rental prices, indicating that universities can indeed be considered as amenities in the rental market, leading to a rent premium (Jaffe & Bussa, 1977; Fields et al., 2013). Moreover, non-local students exhibit a small income elasticity of housing demand (Chang, 2017), indicating that their demand for rental housing may remain resilient even during macroeconomic fluctuations (Tucker, 2009). Consequently, leasing properties near campuses could be a promising business opportunity for landlords. On the flip side, it is essential to recognize that students may have unique preferences when it comes to rental properties. Chang (2017) found that students cluster and live near their peers, suggesting a distinct communal preference. Furthermore, they may prioritize specific amenities when seeking rental housing. Understanding this distinctive demand is vital for a successful rental business near universities.

This report aims to gain insights into the university rental market. We utilize novel rental listing data to provide a comprehensive overview of this unique

market segment in Southern California. Our sample includes over 4 million rental listings near 169 four-year universities across 6 counties¹, spanning from 2014 to 2023. Leveraging econometrics models, we find that within the university rental market, a reduction of one kilometer in the distance to universities is associated with a \$120 increase in the asking rent. In addition, we delve into the demand and supply dynamics of the university rental market by integrating the listing data and the American Community Survey. Our findings reveal that rental units near universities are characterized by their smaller size, typically featuring studios to two-bedroom units. Additionally, these properties place a premium on specific amenities, such as extra bathrooms and access to gym facilities. Notably, the residents of communities adjacent to universities tend to be more educated, diverse, and younger than the average neighborhood in Southern California.

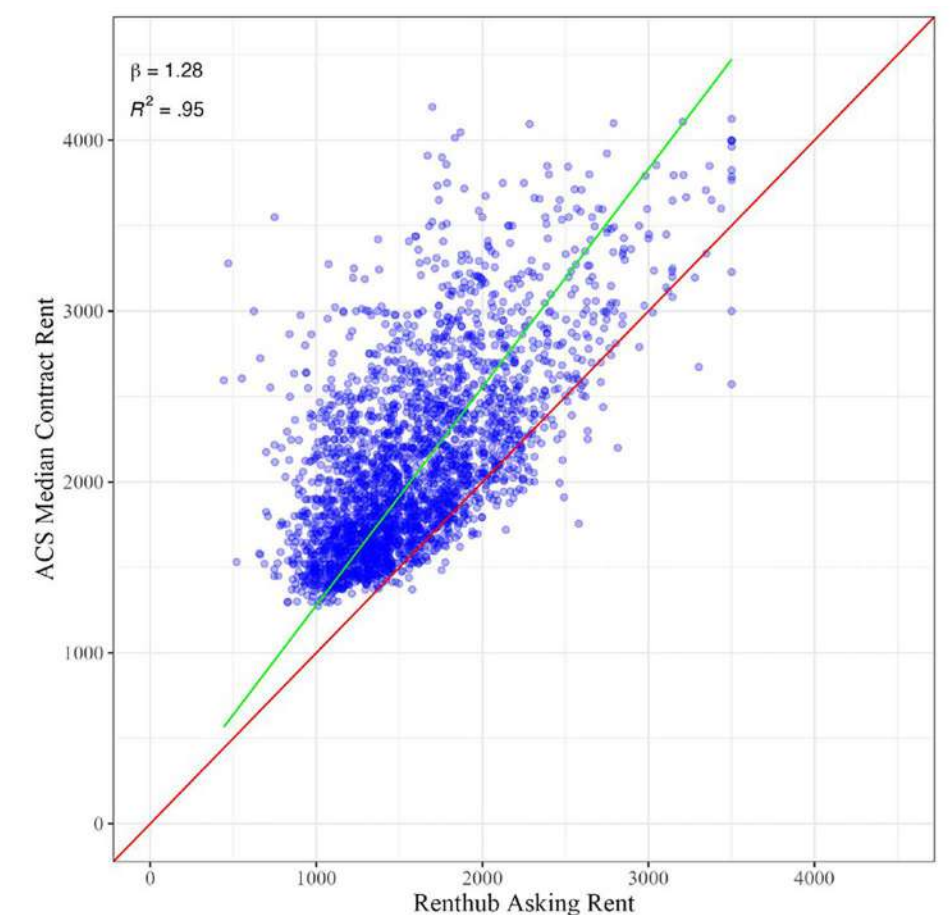
The rest of the report will proceed as follows. We first discuss the data and methods. We then provide an overview of the university rental market. The following section shows a more in-depth analysis of potential rent premiums and the heterogeneity across various market segments. Finally, we provide recommendations for investing in the rental market near universities.

Data and Method

We employ three sources of data to assess the university rental market. The first data are sourced from Renthub.com, a rental market consulting firm. This dataset comprises property-level rental listings, including information such as the street address of each listing, asking rents, and a list of amenities associated with each rental property. We restrict the data to six counties in Southern California, which leaves us with 4.6 million rental listings.

To validate the Renthub data, we link all listings to their census tracts and create tract-level median asking rents from 2014 to 2018. We then compare these data with the tract-level median contract rent from the American Community Survey (ACS) 2014-2018 five-year estimates. Figure 1 shows the fitted line (green) of this regression. Renthub data explain 95 percent of variations in the ACS median contract rent. For every one-dollar increase in the ACS median contract rent, we observed a \$1.28 increase in the Renthub asking rent. This is unsurprising as the final contract rent may often be negotiated to a lower rate than the initial asking rent, a result of the bargaining process between landlords and tenants. Overall, the data look representative.

Figure 1. Renthub Asking Rent Compared to ACS Median Contract Rent



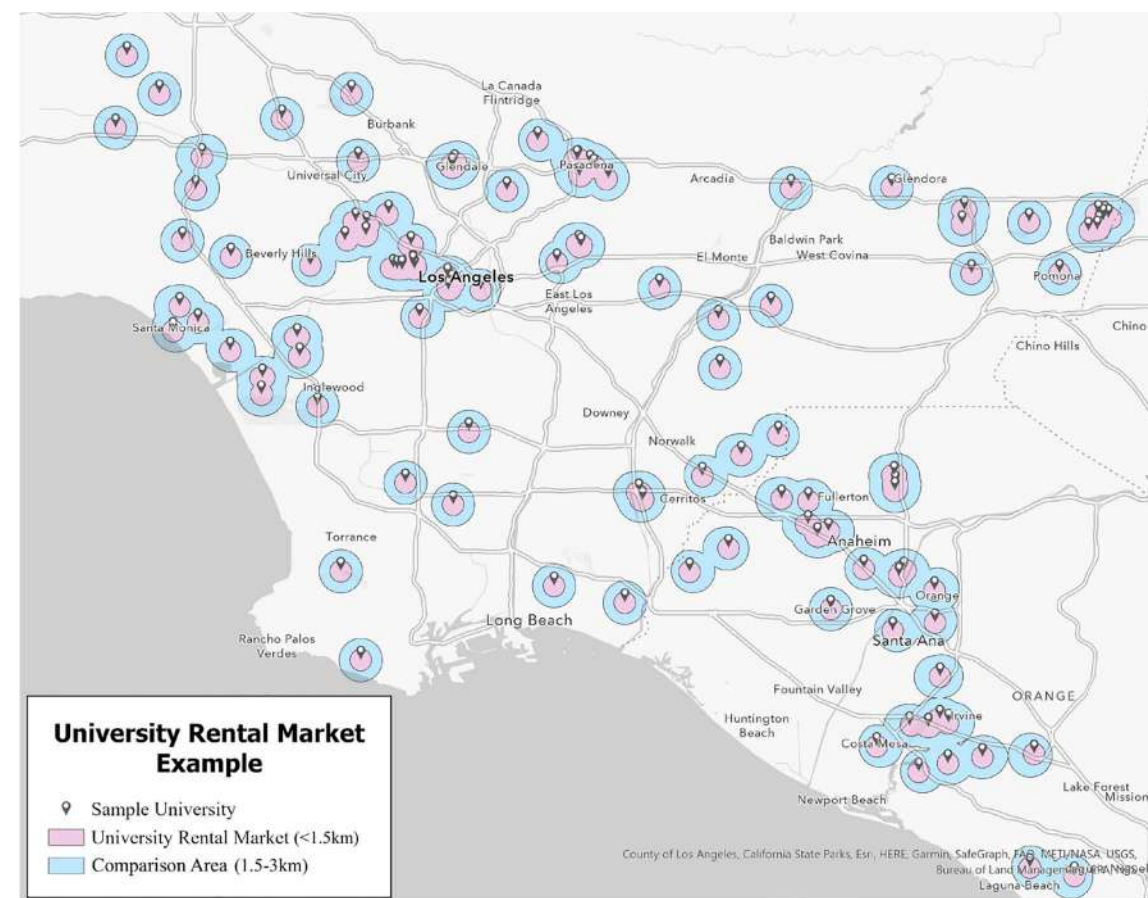
Notes: this figure shows the correlation between Renthub asking rent and 2014-2018 ACS median contract rent on the tract level. Each point represents a census tract. The red line is the 45-degree diagonal. The green line shows the fitted line from regressing ACS median contract rent on Renthub median asking rent.

¹The 6 counties include Los Angeles, Riverside, San Bernardino, Orange County, San Diego, and Ventura. Imperial County is removed from the analysis due to limited data availability.

Data on universities comes from the 2021 Public Data File of the Carnegie Classification of Institutions of Higher Education. This dataset provides information on higher education institutions across the United States, including their geographical location, the range of degrees they offer, dormitory capacity, and enrollment figures. We exclude two-year institutions from our analysis since they predominantly cater to local students with less housing demand near campus. Our final sample comprises 169 universities that offer four or more years of programs. To capture the neighborhood characteristics surrounding these universities and the rental units, we extracted tract-level data from the 2014-2018 and 2017-2021 American Community Survey. Subsequently, we combined this information with rental listings and universities. Our sample covers 3,974 census tracts across six counties.

We adopt a data-driven approach to identify the spatial boundaries of university rental housing markets. Our process begins with visualizing the price gradient based on the distance from sample universities. We then determine a specific distance cutoff that demarcates the spatial extent of each university's rental housing market. Subsequently, we compare rental units located within this defined distance cutoff to units located at a greater distance from each of the sample universities. Figure 2 shows a subset of university rental markets in our sample. The pink circles denote the areas closest to each sample university, which we define as the university rental market. Blue areas encompass rental listings located outside of the university rental market but still in proximity to universities. We assume these two areas share similar characteristics, and the primary difference is their distance from the universities. We can then identify the potential rent premium and supply and demand characteristics of the university rental market by comparing listings in these two circular areas.

Figure 2. A Subset of University Rental Markets in Southern California



Notes: the black-white pins represent sample universities. Pink circles note the university rental market surrounding sample universities. Blue areas are the comparison groups for the pink circles.

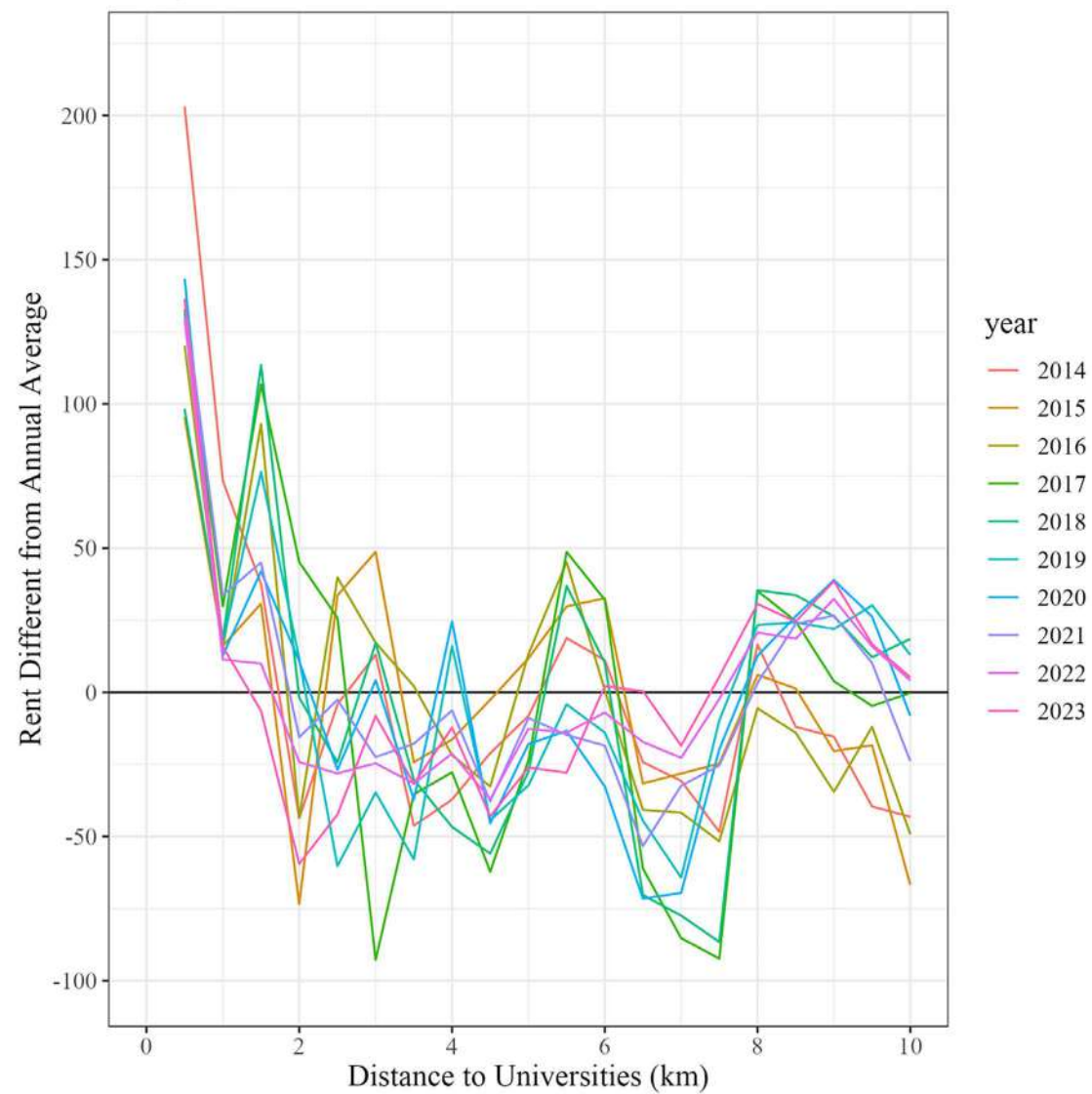
Findings

The asking rent experiences rapidly decline within 2 kilometers from the sample universities.

We calculate the mean asking rents within each 0.5-kilometer interval from the universities yearly and then subtract them from the annual average. Figure 3 indicates that the average asking rent is highest within the first 0.5 kilometers from the sample universities, approximately \$100 to \$200 higher than the annual average. This premium diminishes rapidly as the distance increases. Another peak in asking rents emerges around 1.5 kilometers from the universities, with the difference from the annual average ranging from around \$0 in 2023 to \$100 in 2017. As the distance from universities extends beyond two kilometers, the rent difference drops below \$50 and even becomes negative. This distance-related trend appears consistent over the years.

Therefore, we define the university rental market as the surrounding areas within a radius of 1.5 kilometers from the sample universities (depicted in pink in Figure 2). The comparison areas are represented by the blue regions in Figure 2, located further than 1.5 kilometers but less than 3 kilometers away from the sample universities.

Figure 3. Relative Asking Rent by Distance (in Dollars)



Notes: each line shows the difference between average asking rent for each 0.5 kilometers from sample universities and the annual average asking rent for a sample year.

Rent premia in the university rental market vary greatly across counties.

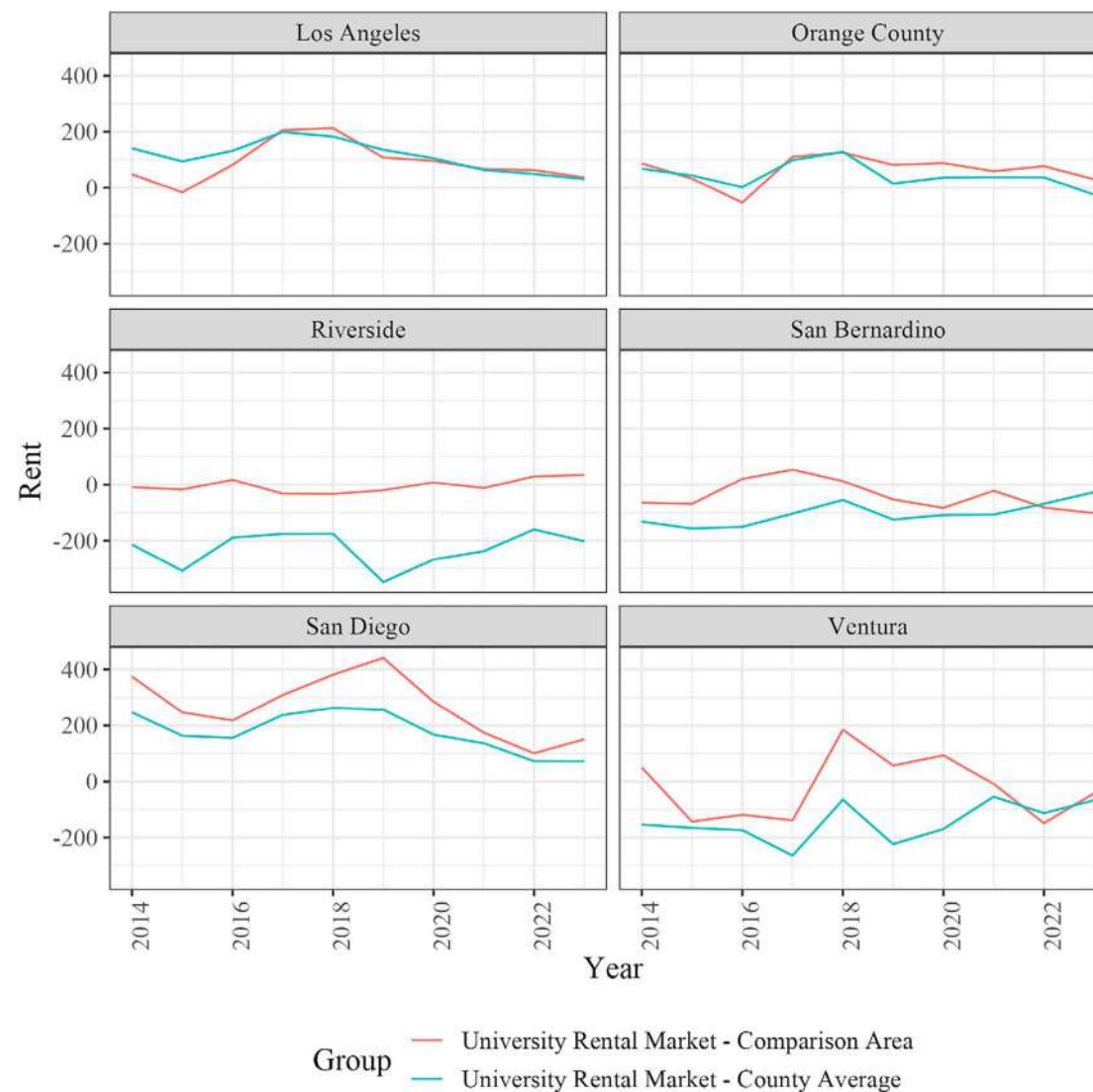
We then compare the asking rents within university rental markets to the comparison areas and the county average in each county. Figure 4 illustrates the variations between the average asking rent in the university rental market and the surrounding areas (red line), as well as between the university rental market and the county average (blue line) respectively. There is substantial heterogeneity in the university rental housing market across counties. In Los Angeles and San Diego, university rental markets demonstrate a noticeable rent premium. However, this premium decreased after 2019 and dropped to near zero by 2022.

On the other hand, there is little rent premium in the university rental market in Orange County. The asking rent in the university rental market is even lower than the county average in Riverside, San Bernardino, and Ventura. These findings could suggest that city or county-specific characteristics constrain the impact of universities on the rental market. Alternatively, systematic differences among universities in these countries may lead to varied effects on rent.

University rental markets exhibit distinct supply and demand characteristics.

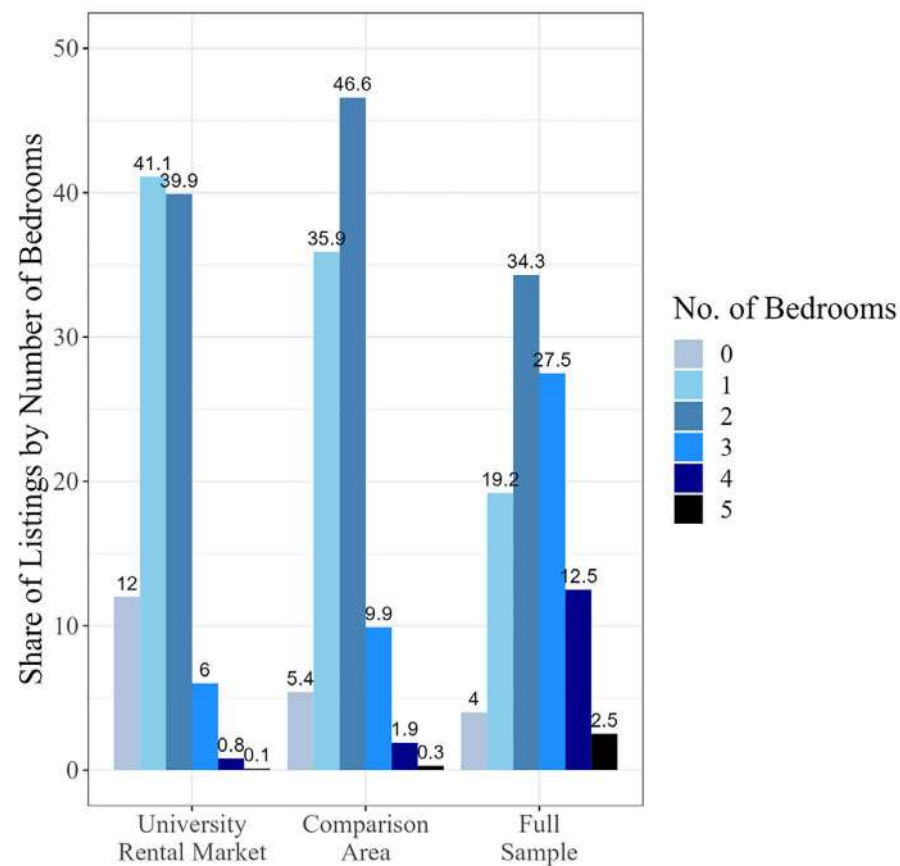
We now compare the listing and neighborhood characteristics of the university rental market with adjacent areas and the entire study area. Notably, rental listings within the university rental market are significantly more likely to have smaller sizes and fewer bedrooms (Figure 4). In the university rental market, over 50 percent of the listings consist of studios or one-bedroom units. This figure decreases to 40 percent in the comparison area and 25 percent in the entire sample, respectively. However, the number of bathrooms in the university rental market is nearly identical to the other two groups, indicating a substantial demand for extra bathrooms in the university rental market.

Figure 4. Relative Rent in University Rental Market by County and Year



Notes: the red line notes the difference between annual average asking rent in university rental market (0 to 1.5 kilometers from universities) and the comparison area (located 1.5 to 3 kilometers away from universities). The blue line marks the difference between annual average asking rent in university rental market and the county average.

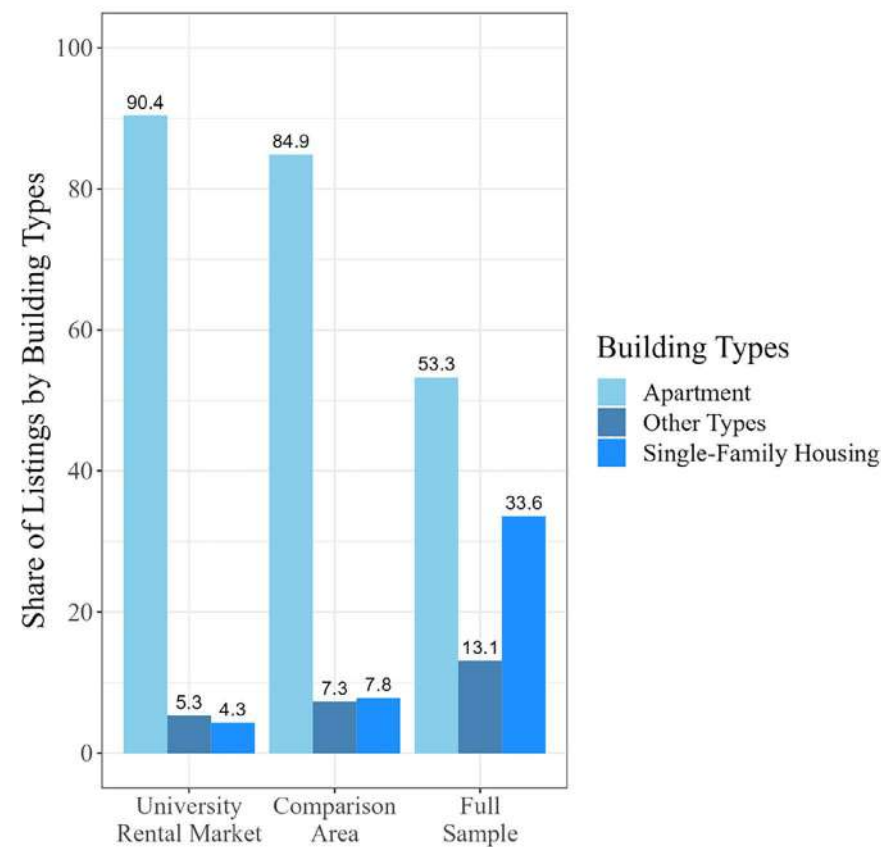
Figure 5. Share of Listings by the Number of Bedrooms



Additionally, a substantial portion of rental listings is situated within apartment buildings in the university rental market, nearly doubling the proportion found in the entire sample (Figure 6). This phenomenon may reflect the preference of students to reside near their peers. Listings within the university rental market are inclined to be furnished and equipped with gyms, although these differences are less pronounced when compared to the other two groups.

Neighborhoods of the university rental market host a more diverse population (Figure 7). A more significant proportion of residents in these neighborhoods are non-Hispanic White and non-Hispanic Asian compared to the other two groups. They are also more likely to be foreign-born. Residents in the neighborhoods near universities are also much more likely to have bachelor's degrees or higher educational attainment. Despite the high educational attainment, neighborhoods in the university rental market have a lower median household income and a higher poverty rate².

Figure 6. Share of Listings by Building Type



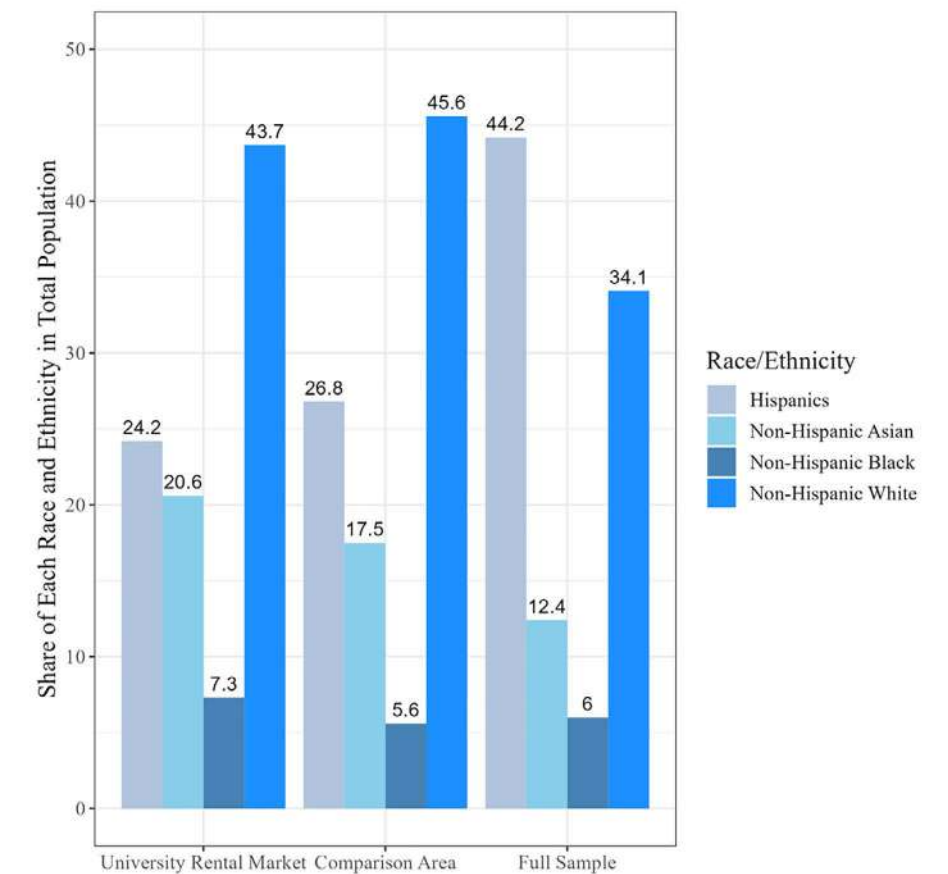
A one-kilometer reduction in the distance to universities predicts a \$120 increase in the asking rent.

To quantify the rent premium in the university rental market, we conducted a regression analysis³, which compared the asking rent in the university rental market with the comparison areas. Located in the university rental market, it generates a \$42 increase in the asking rent, although this estimate is only significant at the 10 percent confidence level. However, after we control for the reverse distance to universities and its interaction with being in the university rental market, listings that are close to universities have a significantly higher asking rent than those located further away. Specifically, being one kilometer closer to the university is associated with a \$119.8 increase in the asking rent.

Listings near universities in cities have larger rent premia than those located in suburban areas.

As previously discussed, there is a high heterogeneity in the rent premia in university rental units across counties (or universities). To formally test how the

Figure 7. Racial Compositions in Sample Neighborhoods



location and characteristic of universities influence their effects on the nearby rental market, we divide the sample universities into two groups based on their locations: in the city and suburban as defined by the National Center for Education Statistics⁴. We run regression analysis on these three subsamples, respectively. Rental listings surrounding sample universities in cities have substantially higher asking rent. As the distance decreases by one kilometer, the asking rent increases by \$155.3. On the other hand, being near universities in suburban areas seems to have little impact on the asking rent.

² Detailed summary statistics are available by request.

³ Regression models and detailed results are available by request.

⁴ Only one university in the sample is in rural area. However, all rental listings lie more than 1.5 kilometers from this university. Therefore, we drop this category.

Conclusion and Recommendation

This report provides valuable insights into the university rental market in Southern California, shedding light on its unique characteristics and dynamics. To conclude, our analysis reveals a significant correlation between proximity to universities and rental prices. A reduction of one kilometer in the distance to universities is associated with a \$120 increase in the asking rent. The university rental market thus presents a valuable investment opportunity.

The university rental market has distinct characteristics. Rental listings near universities tend to be smaller in size, comprised mainly of studios and one-bedroom units. On the other hand, the presence of extra bathrooms and access to gym facilities is highly valued in the university rental market. Neighborhoods in this market segment are racially diverse, have a higher share of residents with high educational attainment, and have slightly lower median household income compared to the average Southern California neighborhood. These findings reflect the unique preferences of tenants in the university rental market.

Our results also highlight that the location of universities, whether in urban or suburban areas, significantly influences rent premia. Listings near universities in cities have substantially higher rent premiums, with a one-kilometer reduction in distance predicting a \$155.3 increase in asking rent. In contrast, being near universities in suburban areas impacts rent less. It is thus crucial for investors to consider the specific location of the university when investing in the nearby rental market. Variations in university rent premiums across counties also caution us to be aware of the county-specific characteristics. Investors should evaluate the local market dynamics and competition when making investment decisions.

In summary, investing in the university rental market can be a promising opportunity, but success requires a thorough understanding of the local market, demographics, and property preferences. It is pivotal to tailor investments to meet the unique demands of students and stay attuned to changing market conditions.

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TECHNICAL NOTES

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Overall Disclaimer

Some of the data in this report was gathered from third party sources and was not independently verified. The Casden Forecast does not make any warranties or representations as to the completeness or accuracy thereof.

METHODOLOGY

- *Quarterly data on rents, vacancies, absorption rates, and net deliveries for rental housing with 5 or more units come from CoStar at the CoStar sub-market level for 2000-2023 Q3. Sub-markets were aggregated manually by the researchers to geographies that were made as similar as possible to the PUMA-based geographies used for reporting demographic data.*
- *County-level employment quotients come from the U.S. Bureau of Labor Statistics for the year 2023 Q1.*
- *Building permit data come from the U.S. Census Bureau for 2000 - 2023.*
- *All migration, household, demographic, and housing statistics reported in the tables are obtained from the 2021 1-year American Community Survey at the PUMA level. PUMAs were then aggregated to match the sub-market geographies based on prior Casden reports.*

USC CASDEN 2023 MULTIFAMILY FORECAST REPORT

